

International Energy Biweekly Review

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INTERNATIONAL ENERGY BIWEEKLY REVIEW

Overview

The strength of Iran's commitment to an oil price freeze will have a crucial bearing on OPEC's decision on whether to raise 1978 crude oil prices. At this time, it is still uncertain how forcefully Iran will assert its support of a price freeze.

The Shah shifted his position while in Washington by pledging that Iran would actively work for a freeze when the cartel members meet in Caracas on 20 December. A staunch Iranian-Saudi Arabian coalition probably could successfully hold the price line, even though most OPEC states strongly favor an increase.

Tehran initially had planned to maintain a neutral position at Caracas and side with the majority. This would have led to an increase of 5 to 10 percent, since Riyadh previously indicated it would not stand alone in support of a price freeze. Shortly before the Shah's announcement, Saudi oil minister Yamani delivered a letter to the United Arab Emirates stating that Saudi Arabia would support a price freeze, unless this policy would cause a split among OPEC countries.

If Iran's commitment to a freeze is softer than the Shah's recent assurances suggest, then an increase in price is still likely. To push through a freeze, the Iranian delegation will have to stick to its stance beyond the opening rounds of negotiations at Caracas and resist pressure to reach an accommodation with the majority in later rounds.

The Shah's recent announcement has sparked little change in strategy among the proponents of a price hike. Those seeking an increase hope to mold a common front that would pressure Saudi Arabia and Iran to conform to the majority position. Both sides want to avoid a replay of the split that occurred last year at Doha.

The Shah's revised position probably has caused some cartel members to lower their expectations. Venezuelan oil minister Hernandez and his Indonesian counterpart

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recently met separately with Kuwaiti oil minister Kazimi and agreed to seek an 8-percent increase at Caracas. These countries reportedly are willing to implement such an increase in two stages—4 percent in January and 4 percent in July. Additional bargaining among Arab members of OPEC will take place at the OAPEC ministerial meeting scheduled for mid-December in Bahrain.

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Abu Dhabi reportedly will reduce its government-imposed oil production ceilings next year by about 250,000 b/d, more than 15 percent below current levels. This decision results from concerns of oil ministry officials—currently disputed by the operating companies—that technical constraints at important onshore and offshore fields limit levels of prudent oil output, at least in the near term. This ministry argument is buttressed by studies of independent reservoir engineering consultants. The government is also reacting to the lack of petroleum exploration in the past few years and the resulting net decline in oil reserves. We do not agree with the judgment in oil industry publications that these production restrictions are politically induced by the current market surplus. We will provide an in-depth technical analysis of this subject in a future issue. (Secret Nofoin-Nocontract-Orcon)

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OPEC PRICE POSITIONS

While the Shah of Iran was coming out for a freeze in 1978 crude oil prices during his Washington visit, representatives of Venezuela and Indonesia were reaching separate agreements with Kuwait to press for an 8-percent increase when the cartel oil ministers meet in Caracas on 20 December. Despite these moves, price positions remain flexible, and more maneuvering is expected before the ministers assemble.

Iran: From "Neutrality" to "Active" Support for a Freeze

Iran will play a pivotal role in the OPEC decision whether to raise crude oil prices on 1 January 1978. When the Shah recently announced that Iran would actively work for a price freeze, he still left himself a wide range of options. At one extreme, the Shah may instruct his delegation to initially support a freeze and then work out an accommodation with the majority in later rounds of negotiation. Or, Iran could back a price freeze to the hilt, using its political influence to win converts and indicating clearly that he will accept no compromise involving an increase. Given the strong feeling among most OPEC states in favor of an increase, a staunch Iranian-Saudi Arabian coalition will be necessary to hold the price line.

Before his Washington visit, the Shah had intended Iran to play a "neutral" role at Caracas. The Iranian representative would have deferred any price presentation until all other member countries made their preferences known; the Iranian delegation was then to have voted with the majority. This is equivalent to Iranian support for a price increase, since most members lean in that direction.

So far, we are not aware of any Iranian efforts to enlist further support for a price freeze within OPEC. Iranian oil officials had not been prebriefed on any shift in Tehran's position before the Shah's Washington visit, and no instructions or clarifications of the Shah's position have been discerned filtering down since the Shah's return. Consequently, we are still uncertain how forcefully Iran will press its support for a freeze on 1978 prices.

Saudi Arabia: Not Willing To Stand Alone

Riyadh is far more reluctant to risk a split on the pricing issue than it was at this time last year. While the Saudis favor a price freeze, their efforts to rally support are largely limited to an impromptu visit by oil minister Yamani to neighboring Kuwait,

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Qatar, and the United Arab Emirates in early November. Yamani's message to the UAE was that Saudi Arabia will support an oil price freeze at Caracas, unless this policy would cause a split among OPEC countries.

Iran's shift came at an important time, probably reinforcing the Saudis' resolve to press for a price freeze. If Iran's support is softer than the Shah's recent pronouncements suggest, however, we believe that Riyadh also would accede to a small price increase.

UAE and Qatar: Support for the Saudis

Both the UAE and Qatar have told Riyadh that the Saudis have their support, whatever the final Saudi position. Both, however, apparently feel that they will not be faced with the choice of siding with a minority decision. After Yamani's visit, UAE oil minister Utayba said "we do not want a repetition of what occurred at Doha." Privately, Utayba admitted that he expects a 5- to 8-percent increase to be approved.

Venezuela: Rejecting a Freeze

While his expectations apparently were lowered slightly by Iran's new price stance, Venezuelan President Perez remains firmly committed to a price hike. Perez is confident, moreover, that Iran will not stand in the way of some increase at the Caracas meeting. When asked by the press for his reaction to the Shah's indication "that he is going to fight for prices to be frozen," Perez replied that is not what the Shah said. "The Shah often has said that he will not be a factor of controversy, that is to say, that his country will not be a factor of controversy in the next OPEC meeting. At least, that is what I have read."

The day after the Shah left Washington, President Perez predicted an increase in OPEC's 1978 prices of "no more than 8 percent and no less than 5 percent." Earlier, Venezuela had been calling for a 10-percent raise. Justifying the increase, which he considered "small" and "reasonable," Perez said "the purchasing power of the dollars we get from our oil has been substantially reduced during the last two years by world inflation, so the increase of price is only fair." Perez rejected a US plea to support a freeze.

To rally support for an increase, Perez sent oil minister Hernandez to the Mideast earlier this month. At a meeting with Kuwait's oil minister Kazimi, the two reportedly agreed to press for a two-part, 8-percent price increase—4 percent in January and 4 percent in July. Hernandez told the Kuwaitis that he had enlisted widespread support for this formula.

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Kuwait: Wants To Compensate for Inflation

Kuwait has received three OPEC oil ministers this month—Yamani, Hernandez, and Indonesia's Sadli. Kuwait reportedly agreed with both Sadli and Hernandez to support an 8-percent increase. Kuwait considers its position as moderate, asking only to cover inflation and losses in the value of its foreign investments.

During the Yamani visit, which preceded the others, Kuwait reportedly told the Saudis that it would accept the "final" Saudi position, probably expecting it to be in line with the majority.

Other Cartel Members

Pressure for a price increase of at least 10 percent will come from the usual group of price hawks. Iraq's claim that a 23-percent raise is justified by inflation and rising costs of imports from consuming nations is unrealistic; this percentage obviously is being used as an opening wedge. Iraq has claimed agreement on pricing policy with Algeria, who supports a 10-percent increase. Libya also favors an increase of at least 10 percent.

Among the remaining OPEC members, Indonesia is worried that revenue requirements cannot be met without an increase of at least 8 percent. Suharto sent Sadli to the Mideast to encourage support for such a raise. Nigeria probably favors an increase but is taking a backseat in the bargaining. Gabon and Ecuador have no influence over the decision other than to add votes to the majority.

Outlook

OPEC states are still refraining from final commitments to particular price positions, primarily to smooth the way to a consensus at Caracas. There is an overriding interest in the prevention of a split. Although the Shah's shift boosts prospects for a price freeze, Iran will have to stand firm at Caracas if an oil price increase is to be avoided. (Secret Nofofn-Nocontract-Orcon)

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MIDDLE EAST: REFINING AND PETROCHEMICAL EXPANSION

The prospect of refined and petrochemical products from Middle East countries flooding world markets has greatly receded over the past three years. Ambitious plans for export-oriented industries formulated after the 1973 oil price hikes have been reevaluated because of cost overruns and construction lags. While expansion of refining and petrochemical capacity will be substantial during the next five years, it

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will nevertheless represent only a little more than one-half of initially planned objectives. A review of projects in 12 Middle East countries indicates that at a maximum the region's refining capacity will increase by nearly 3 million b/d between 1976 and 1982, reaching 7 percent of projected world capacity. Petrochemical capacity will not exceed 4 to 5 percent of the projected world total.

Obstacles to Development

The impetus for moving into broad processing of hydrocarbons came with the quadrupling of oil prices in 1973/74. Middle East oil producers saw the jump in revenues as an opportunity to use surplus funds for the acquisition of advanced technology and to gain further value added from their resources. They also intended to make productive use of gas associated with crude oil production rather than waste it by flaring. International companies encouraged these plans, competing to offer technology and to take part in joint ventures. The projects were appealing to Western companies because they expected the oil producers to offer cheap feedstocks and to finance a large share of construction.

Perhaps the greatest impediment to these plans, however, was a general failure to anticipate the problems and costs of rapid industrialization in developing countries. A good deal of expensive direct supporting facilities such as desalination plants, electric power, ports, roads, and local repair shops had to be built from scratch. Simultaneous demand for project designs taxed the relatively few engineering firms qualified to handle such complex industries. The world inflationary spiral was compounded in the region by inability to assimilate imports, low labor productivity, and competition for foreign labor. Under these conditions, construction costs for a given project typically turned out to be double what a comparable facility would cost in the United States.

All of the Middle East oil states have had second thoughts about their plans to expand oil refinery and petrochemical capacity. In almost all cases construction plans have been stretched out and in at least some instances planned projects may eventually be canceled altogether. As a result even revised projections of how much capacity may come on stream over the next five years are probably on the high side.

Refineries

Based on crude throughput, new refinery capacity likely to be put in operation during 1977-82 will amount to at most 2.9 million b/d, including expansion of existing refineries. Allowing for growth in domestic consumption, export capability of the 12 countries will increase from 1.2 million b/d in 1976 to roughly 3 million b/d in 1982.

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Oil Refinery Expansion

Thousand b/d

| | Capacity Yearend 1976 | Additions | | | | | |
|--------------------|--------------------------|------------|------------|--------------|------------|------------|------------|
| | | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| Total | 3,123 | 245 | 224 | 1,040 | 250 | 620 | 500 |
| Abu Dhabi | 15 | 0 | 0 | 0 | 0 | 120 | 0 |
| Algeria | 123 | 0 | 0 | 380 | 0 | 0 | 0 |
| Bahrain | 250 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dubai | 0 | 0 | 0 | 0 | 0 | 200 | 0 |
| Egypt | 235 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iran | 781 | 245 | 40 | 200 | 0 | 0 | 0 |
| Iraq | 169 | 0 | 0 | 70 | 0 | 300 | 0 |
| Kuwait | 685 | 0 | 0 | 0 | 0 | 0 | 0 |
| Libya | 135 | 0 | 0 | 220 | 0 | 0 | 0 |
| Qatar | 9 | 0 | 0 | 0 | 150 | 0 | 0 |
| Saudi Arabia | 604 | 0 | 0 | 170 | 100 | 0 | 500 |
| Syria | 117 | 0 | 184 | 0 | 0 | 0 | 0 |

Reported construction schedules show a bunching of new capacity in 1979, but some slippage is probable.

The schedule for 1980-82 is considerably more uncertain. Based on available information, for example, construction of planned refineries in Abu Dhabi and Dubai has not even begun. Neither has construction started on two Saudi Arabian refineries planned for 1982, although site preparation is under way and design contracts have been let. If completion of these facilities is delayed, total capacity additions would amount to only around 2 million b/d by 1982.

Petrochemicals

Most of the Middle East projects include plans for downstream processing plants that will transform ammonia into fertilizer and ethylene into plastics, artificial fibers, and synthetic rubber.

As in the case of refinery construction, deviation from targeted schedules is highly probable, especially in the last two years of the period under review. At a maximum, some 3.8 million tons of new ammonia capacity will be put on stream, accompanied by about 2.4 million tons of ethylene. The grandiose Saudi Arabian development plan calls for five petrochemical complexes, of which it is estimated only one ammonia and one ethylene facility will actually be completed by 1982.

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Petrochemicals Capacity Expansion

| | | Thousand Tons | | | | | |
|-----------------------|--------------------------|---------------|------------|--------------|------------|------------|------------|
| | | Additions | | | | | |
| | Capacity Yearend 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| Ammonia | 1,742 | 660 | 960 | 1,160 | 160 | 600 | 300 |
| Algeria | 0 | 330 | 330 | 0 | 0 | 0 | 0 |
| Egypt | 260 | 0 | 330 | 100 | 0 | 0 | 0 |
| Iran | 215 | 0 | 0 | 400 | 160 | 0 | 0 |
| Iraq | 84 | 0 | 0 | 660 | 0 | 0 | 0 |
| Kuwait | 660 | 0 | 0 | 0 | 0 | 0 | 300 |
| Libya | 0 | 330 | 0 | 0 | 0 | 0 | 0 |
| Qatar | 270 | 0 | 300 | 0 | 0 | 0 | 0 |
| Saudi Arabia | 200 | 0 | 0 | 0 | 0 | 600 | 0 |
| Syria | 53 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ethylene | 12 | 0 | 400 | 770 | 300 | 630 | 350 |
| Algeria | 0 | 0 | 0 | 140 | 0 | 0 | 0 |
| Iran | 12 | 0 | 0 | 0 | 300 | 0 | 0 |
| Iraq | 0 | 0 | 0 | 0 | 0 | 130 | 0 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | 350 |
| Libya | 0 | 0 | 400 | 330 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 300 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 0 | 0 | 0 | 500 | 0 |

Assessing the market potential for these new facilities is far more tenuous than for oil refinery products. In general, the more broadly based economies of Egypt, Iran, and Iraq will consume all or most of their domestic production. Kuwait, Qatar, and Saudi Arabia, however, will definitely be looking at export markets for their products.

World Context

An examination of projects already under way or in advanced stages of planning indicates that the region will increase moderately its share of world capacity by 1982. Using rough forecasts of growth in capacity elsewhere, Middle East refining capacity under the most optimistic conditions will increase from 4 percent of the world's total last year to about 6.7 percent in 1982; petrochemicals will make up less than 4 to 5 percent of total capacity.

Looking at the Persian Gulf alone, the impact of capacity growth is even less pronounced. Assuming that Saudi Arabia and other Gulf countries complete 2.1 million b/d of refinery capacity expansion, their share of world capacity will increase from 3.4 percent in 1976 to 5.2 percent in 1982. Similarly, ammonia capacity will

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Middle East Shares of World Capacity

| | World Thousand b/d | Middle East | Percent |
|---------------|-----------------------|-------------|---------|
| <hr/> | | | |
| Refining | | | |
| 1976..... | 74,800 | 3,123 | 4.2 |
| 1982..... | 89,000 | 6,002 | 6.7 |
| <hr/> | | | |
| Thousand Tons | | | |
| <hr/> | | | |
| Ammonia | | | |
| 1976..... | 74,000 | 1,742 | 2.4 |
| 1982..... | 122,000 | 5,582 | 4.6 |
| <hr/> | | | |
| Ethylene | | | |
| 1976..... | 36,000 | 12 | Negl |
| 1982..... | 66,000 | 2,462 | 3.7 |
| <hr/> | | | |

grow from 1.9 percent to 3.2 percent and ethylene from a negligible amount to 2.4 percent.

Further into the 1980s, this situation could change if all projects currently on the books are built. Given the problems encountered thus far, however, it appears likely that the oil producers will adopt a more measured pace of expansion that will extend completion of their programs into the 1990s.

Pressure on Western Partners

Many of the refinery and petrochemical projects under construction or planned in OPEC countries involve some capital participation on the part of Western firms. In several cases, however, foreign companies are going ahead rather reluctantly because of the high costs and uncertainty over marketing prospects. Capital investment of the Saudi petrochemical projects, for example, runs to about \$1 billion each, double the cost in the United States. Despite Saudi long-term loans at relatively favorable interest rates, the foreign partners see little chance of turning out competitively priced products without heavy government subsidy of feedstocks as well. These subsidies, if provided, could support "dumping" charges once marketing begins.

Recognizing this problem, the Saudis have been pressuring Japanese firms to carry through on earlier project commitments, using the promise of long-term guaranteed crude supplies as an incentive. As early as 1973 a leading Japanese conglomerate—Mitsubishi Corporation—had proposed building a large integrated complex to include refining, basic feedstock, and downstream products. To date the

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company has not submitted a firm design tender, on grounds that end-products from Saudi facilities would be in competition with other Mitsubishi-owned production lines in the Far East. The Saudis are disturbed by Japanese delaying tactics and their unwillingness to take a larger role in costly Saudi development programs. In the interim, the Saudis have obtained design tenders from US corporations for two refining and four petrochemical projects.

A parallel pitch by OPEC as a group may be shaping up to link crude supplies with the sale of petrochemical products. On two recent occasions, OPEC Secretary General Ali Jaidah publicly raised this possibility. His theme in essence was that "security of oil supply can only be real and enduring" if industrial countries accommodate their markets to import OPEC downstream products. In making these arguments, the OPEC countries realize that unless expansion plans worldwide are substantially reduced, refinery and petrochemical plant capacity will exceed world demand by a wide margin through the early 1980s. (Secret Noform-Nocontract)

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OPEC PARTICIPATION IN DOWNSTREAM PETROLEUM OPERATIONS

Emphasizing an increasingly favorite OPEC theme, OPEC Secretary General Ali Jaidah recently warned a West German audience that the willingness of Western Europe to export advanced technology would play an important part in shaping OPEC's future oil policies.

On Economic Relations

"Planning for future energy needs can only be meaningful if the OPEC area, as the main exporter of petroleum to Europe, the United States, and Japan, is accepted as a positive partner and not regarded as a hostile group which ought to be dismantled." Jaidah asserted "perhaps the consuming countries feel that their obligations are terminated by payment of the monetary price of OPEC oil and gas. In this connection, it is my feeling that we should be thinking less in terms of the dollar value of our oil, and more and more in terms of the material commitment by the consumers to our transformation. . . . It is to Western Europe, more than elsewhere, that we look for economic cooperation, educational training, manpower development, technological transfers and social improvement. . . . We believe that Europe, having largely overcome the debilitating effects of the recent recession, should now feel itself in the position to make good the promise to carry out meaningful and effective transfer of appropriate technology in a fairer international division of labor."

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Jaidah said OPEC is particularly interested in moving into downstream petroleum operations as an initial step in broadening its economic base. The Secretary General accused Western nations of trying to block OPEC's entrance into these areas, and resisting competition from OPEC petroleum products in Western markets. "It is to oil that we naturally look for the means with which our member countries can diversify their economies. . . . The first and most natural step in our efforts towards industrialization is to integrate the oil sectors with the rest of our economies and use this sector as an engine of structural change . . . but there is an alarming unwillingness [of developed countries] to cooperate in refining and petrochemicals for export purposes, on a fair and equitable basis. Total OPEC member countries' share in world refining is only 6 percent—that is, 4.6 million b/d. We are told that there is already a surplus in refining and petrochemical plants, but we see that several countries in Europe and elsewhere are building new plants." Jaidah also charged that Europe uses EC tariffs on oil products, patent restrictions, and other institutional barriers to keep OPEC out of the market.

OPEC's overriding objective in diversifying is to prepare for the period when oil exports begin to dwindle. "If all we get for our oil, when it is exhausted, are bank accounts and a few losing projects, that would be tragic indeed." Jaidah noted that OPEC states will want to share in the supply of new energy sources, including nuclear and solar power. OPEC feels that its willingness to deplete its own petroleum resources now to satisfy world energy requirements entitles its members to access to the technology for energy alternatives in the future.

Jaidah made it clear that OPEC intends to use its oil leverage to achieve its economic and technological goals. "On our side, we have to reflect upon our strategies regarding supply and prices of oil."

On Oil Prices and Supply

Jaidah argued "the price of oil ought to be measured by the degree of development and diversification in our economies and the acceptance by the consumers of non-oil exports from our countries." The consuming countries need to accept "a view of prices which is rational and designed to achieve optimal allocation of exhaustible energy resources."

Jaidah complained that while "we recognize the need for stable supplies within a commercial context . . . security of supply seems to be taken for granted by consuming countries without any real collateral." He called for "some real efforts for change. Security of oil supply can only be real and enduring if consumers succeed in making

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our economies dependent on them as suppliers for development goods and eventually markets for our non-oil exports. Interdependence is the only guarantee of real security of supply in both directions. . . . But unless we reach a fairer international division of labor, frictions will arise."

Jaidah was confident that OPEC's leverage will continue to increase as petroleum supplies tighten. He warned that despite the availability of North Sea and Alaskan crude, "the next two or three years will not witness a decline in demand for OPEC oil. The most likely eventuality is that a global shortage will be slightly delayed and some OPEC countries will be relieved from the pressure to produce at levels higher than their needs warrant." Jaidah foresees an "ever-increasing gap in world energy demand from its presently known reserves" after the next four or five years, which he feels OPEC should not be expected to fill. "Our own estimates show that existing reserves, plus likely additional reserves, might enable us to reach production levels which are not very much in excess of 40 million b/d." (Current production capacity is 37.5 million b/d.) According to Jaidah, the intervening "breathing space" should be a time of close cooperation between consuming and producing nations in planning for future energy needs, and in financing and researching additional energy resources, both petroleum and non-petroleum. (Unclassified)

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**OIL RESERVES OF EXPORTING COUNTRIES
AND THE TIME HORIZON OF THEIR DEPLETION**

The OPEC Secretariat is examining optimum strategies for rationally producing the oil reserves of its member countries to maximize the ultimate volume of oil recovery. Many oil exporting countries are becoming increasingly reluctant to expand daily productive capacity to its full potential if this development jeopardizes maximum recovery. Reproduced below is an article that appeared in the OAPEC Quarterly Journal Oil and Arab Cooperation (Fall 1977) addressing this issue. The author Adnan Janabi is a senior economic analyst in OPEC and the former director in the Economic Department of the Iraqi Petroleum Ministry.

Interest has grown in the problem of the depletion of resources in general and that of oil resources in particular. Despite this wide-ranging interest, an important gap has been left unfilled in the theoretical frameworks presented by the science of economics.

The past policies of the major oil companies on production cannot be considered as optimal for several reasons, mainly because the companies' income from a unit of

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production was fairly steadily while their discount rate for time in most producing countries was very high; thus their preference was always for early depletion.

Producing countries have been playing an increasing role in production decisions. Despite this new situation, exporting countries still generally tend to respond to demand rather than act upon it. Price decisions are not geared to influence total consumption. The most important determinant of depletion policies in exporting countries can therefore be traced back to the level of economic activity in consuming countries.

The depletion of oil reserves is governed by rates of production of what are called "proven reserves." In the final analysis, the critical factor for the examination of the depletion of reserves is not presently known reserves but "probable reserves," reserves that are ultimately recoverable. Improved recovery techniques and new discoveries are bound to increase presently "proven reserves" over time.

Efficient production policies must not allow the physical waste which results from excessively speedy depletion. Maximum Efficient Recovery (MER) determines the upper limit of any rational depletion policy.

Empirical examination of the production policies of oil-exporting countries shows that they fall into two broad groups. The first group have little or no opportunity to increase their production beyond present levels if MER curves are to be respected. The second group still have the potential to tailor their production policies according to their future requirements and considerations relating to conservation. Needless to say, increased reserves would extend the life span of production plotted in the present paper. But such extensions should be viewed as a contribution to the supply of future needs, not as an opportunity to increase production rates.

Venezuela has already decided to bring down its production from 3.8 million b/d in 1970 to around 2 million b/d. This reduction may be viewed as having been forced by circumstances rather than as a preconceived depletion strategy. On the other hand, Kuwait's decision to produce a maximum of about 3 million b/d (while producing far less in practice) is a clear indication of a depletion policy based on considerations other than imminent natural decline. Since 1970, a combination of reasons has prompted Libya to bring down its production level, putting an end to unsound production practices of the companies, and going further to institute some action to prolong the life span of its reserves.

Venezuela, Indonesia, Algeria, Nigeria, and Iran are faced with two problems as a result of past production policies. First, they cannot increase their present production levels without doing damage to the life span of their reserves. Second, problems might arise in the long run in satisfying their indigenous energy requirements. Iraq, Saudi

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Arabia, Abu Dhabi, Libya, and Kuwait still have the opportunity to shape their production policies, in varying degrees, to take into account their future requirements and to evolve conservation strategies in the light of their national interests.

The time horizon of the depletion of oil resources of the exporting countries is not very long, and would be shortened further by the absence of long-term depletion strategies. Some of the oil-exporting countries may face a crisis in meeting their internal energy requirements before long.

It is evident that the pursuit of rational production policies necessitates reduced or stabilized production levels in all the cases mentioned, although upward pressure on prices would naturally be created. Regarding the time horizon of depletion, however, the development would be welcome, for it would enable the exporting countries to raise their income without resorting to increased production rates. (Unclassified)

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SOVIETS MOVE TOWARD TERTIARY OIL RECOVERY

The USSR is taking steps to activate a high-priority program of enhanced recovery to increase oil yields from older fields. In early November the Soviets signed a \$24.5 million contract with an Italian firm, Pressindustria, to build the world's largest plant for producing nonionic surfactants from ethylene-oxide for use in tertiary oil recovery. This plant, which may be built in West Siberia, will have an annual output of 250,000 tons of surfactant but probably will not be on stream before the early 1980s.

Because of the lack of exploration success in recent years and the high cost and difficulty of developing oil reserves in remote regions, the USSR plans to use enhanced recovery techniques intensively to recover an additional 10 to 12 percent of the original oil in place from fields currently in production or under development. The Soviets have only limited experience with most enhanced recovery techniques other than waterflooding, although they have tried every major secondary and tertiary recovery method on an experimental or pilot basis in at least one oil field. A commercial-scale effort has been stalled by persistent shortages of the necessary chemicals, equipment, and trained personnel.

During the past year the Soviets have made several attempts to obtain technology and equipment from the West for enhanced oil recovery projects. In addition to the surfactant plant from Italy, they have discussed the purchase of a 45,000-metric-ton/year surfactant plant with a West German firm. This plant would be installed in the Urals and would be used to support surfactant flooding projects in that area. The

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Soviets also have attempted to obtain US licensing rights to a process for producing petroleum-based feedstocks for surfactants; negotiations for a plant using this process are under way with a West German firm. The USSR is also discussing the installation of two carbon dioxide (CO₂) plants with West German and UK companies. These plants, with combined capacities of about 2.5 million tons per year, would be used for miscible flooding projects.

Using surfactants to enhance oil recovery is expensive and time consuming and will not yield the volumes of oil required to solve the long-term problems that we foresee in the Soviet oil industry. For example, use of 250,000 tons of surfactants in a tertiary recovery operation could yield an additional 63,000 b/d to 215,000 b/d of oil, depending on the amount of surfactant required for the individual reservoir. Including only the amortization costs of the plant to produce the surfactants, each barrel of oil recovered would cost from \$4 to \$14.

Technology Note

Micellar flooding, also known as surfactant flooding or microemulsion flooding, is one of several enhanced oil recovery techniques to get more oil out of reservoirs than can be obtained by conventional primary and secondary methods. In this technique, a two-step process is normally used to yield more oil. First, a slug of surfactant (petroleum sulfonate) and an alcohol (cosurfactant) is injected to lower interfacial tension. Next comes a large slug of water containing a high molecular weight polymer. This water-polymer slug pushes the chemicals through the field and improves mobility and sweep efficiency.

Each reservoir has unique properties and the amount and the type of polymer, surfactant, and alcohol used for the micellar slug will vary depending on the specific properties of the fluid and rock involved. The amount of chemicals for the surfactant slug alone can range from 3 to 11 kilograms per barrel of oil recovered. The polymer-water slug could take from 0.2 to 0.5 kilograms of polymer, depending on the reservoir characteristics. (Confidential)

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ISRAELIS FIND OIL IN GULF OF SUEZ

Announcement of a promising oil discovery about 30 kilometers southeast of At Tur along the eastern shore of the Gulf of Suez was made on 25 November 1977. An Israeli drilling rig has been working in this area for almost a year without any apparent success until last week. The new well is reported to be flowing at about 2,000 to 4,500 b/d from 1,680-meter depths.

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The encouraging production test and the depth suggest that the Israelis may have tapped a commercial oil deposit. Although it is premature to speculate on the size of the reserves, high-quality offshore reservoirs have been found by the Egyptians at El Morgan, July, and Ramadan about 50 kilometers to the northwest. More delineation drilling and production testing will be required before development plans unfold. The Israeli find will almost certainly encourage Egypt's interest in a peace settlement that would allow drilling in 16 or so additional structures on the Israeli side of the median line in the Gulf of Suez. (Confidential)

* * * * *

OPEC OIL EARNINGS: IMPACT OF EXCHANGE RATE FLUCTUATIONS

At this time, we do not think OPEC will switch from US dollar-denominated oil prices. The decline in the value of the dollar since the last OPEC meeting in December 1976 has again raised concern among OPEC countries over the declining real value of their oil earnings, which are denominated in dollars. Deliberations at the upcoming December meeting in Caracas will be influenced by this issue, but most OPEC members realize that pricing oil in dollars continues to work to their advantage. The OPEC Economic Commission Board has calculated that losses due to the declining value of the dollar in the last year have been minimal; the oil ministers are unlikely to move to a new unit of oil pricing in the near future.

From time to time various OPEC members have questioned pricing oil in dollars, sometimes advocating pricing in IMF Special Drawing Rights (SDRs) or some other basket of currencies. We used three methods to measure whether OPEC members have gained or lost from the dollar pricing of oil: by comparing the dollar's value relative to (a) the SDR, (b) a group of major currencies weighted by the value of *OPEC imports* from each country, and (c) the same group of major currencies weighted by the value of *OPEC imports and foreign investments* in each currency.

SDR Pricing

According to press reports, OPEC concern over erosion of real export earnings has rekindled interest in alternative oil pricing schemes. For example, Shaykh Ali Khalifa, Under Secretary to the Kuwaiti Acting Oil Minister, recently discussed preserving the real value of oil earnings by setting oil prices in SDRs. OPEC members have not discussed any specific alternative basket of currencies besides the SDR group. Since members have different trading patterns with the major developed countries, they would have difficulty agreeing on another currency mix.

30 November 1977

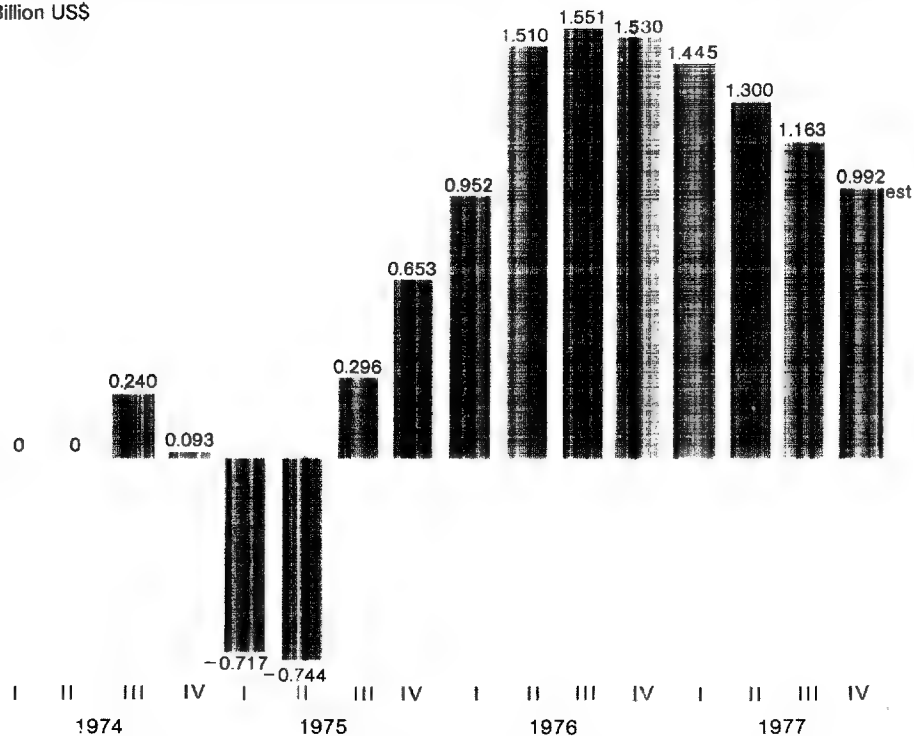
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OPEC: Net Revenue Accrued from Dollar Prices Relative to SDR Denominated Prices¹

Billion US\$



1. Net revenues are obtained by multiplying gross revenues by the changes in the SDR per US\$ index based on 1973 parity.

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The dollar has declined 1.4 percent against the SDR since the end of 1976, when most OPEC members last raised oil prices. Despite this decline, the value of the US dollar relative to the SDR is still nearly 3 percent above its 1973 level. Based on the dollar-SDR parity of 1973, the dollar fell below its base period level only between December 1974 and July 1975.

Over the last four years, OPEC revenues from dollar oil prices have far exceeded the potential revenues that would have been generated through an SDR pricing system. Since mid-1974, when the dollar began to float against the SDR, cumulative dollar revenues have been more than \$10 billion above the amount that would have been received under an SDR pricing scheme.

Exchange Rate Movements

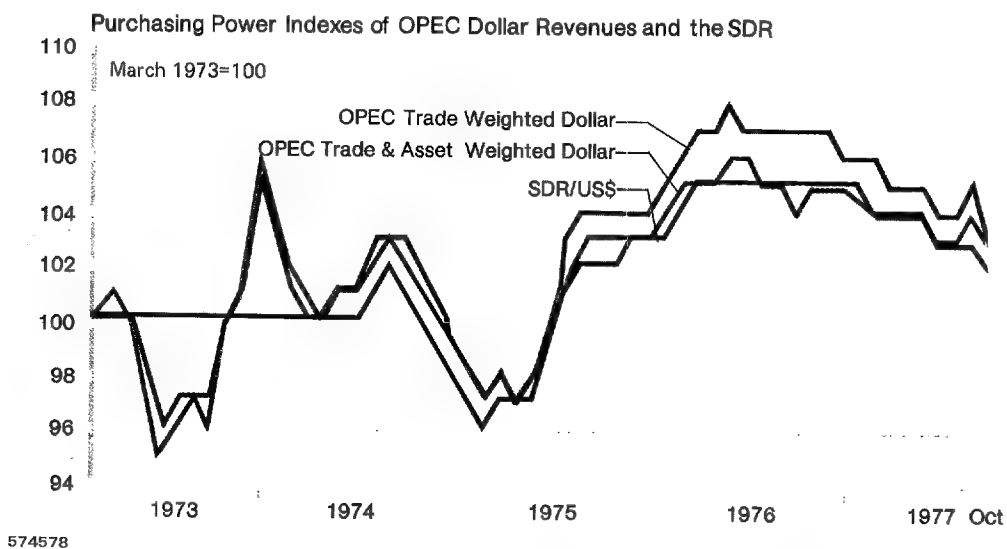
Following the abandonment of the fixed exchange rate system in March 1973, the value of major currencies has been determined largely by market forces. In terms

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of dollars, OPEC countries pay higher real prices for goods imported from countries whose currencies appreciate against the dollar and pay lower real prices for imports from countries with depreciating currencies. Exchange rate movements have no effect on OPEC imports from the United States, which are also in dollars. Since December 1976, appreciation of the yen, pound, and mark has increased the real price of imports from Japan, the United Kingdom, and West Germany to OPEC members in terms of their dollar-denominated exports. On the other hand, the real prices of imports from Australia, Canada, Denmark, Norway, Spain, and Sweden have fallen because their currencies have lost value relative to the US dollar.

The Purchasing Power of OPEC Oil Earnings

In 1977 the rapid appreciation of the yen and the continuing strength of the West German mark lowered the purchasing power index for the dollar, as weighted by *OPEC imports*, by about 3.5 percent. Nonetheless, at the end of October, the index stood at 3 percent above the March 1973 level.* By the end of 1976 the dollar purchasing power index had risen by nearly 7 percent over its March 1973 level. Since oil prices quadrupled in 1973/1974, dollar-denominated oil prices have generated a purchasing power gain for OPEC countries, except for the first six months of 1975.



*The purchasing power index of dollar revenues received by OPEC countries is a geometric average of the indexes for the currencies of 17 major industrial nations relative to the US dollar, weighted by 1976 OPEC imports from the group. The nations are Australia, Austria, Belgium, Canada, Denmark, France, Italy, Japan, Netherlands, Norway, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States, and West Germany. These countries supply more than 80 percent of OPEC imports.

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The purchasing power index of dollar revenues weighted by *OPEC trade and foreign investment flows* for 1976 shows less variation resulting from exchange rate movements; this is attributable to the predominance of dollar-denominated financial assets in the OPEC investment portfolio. From total export earnings of \$123 billion in 1976, OPEC spent 77 percent on imports of goods and services and the remainder on foreign-currency-denominated assets. This year, the trade and asset weighted index has fallen 3 percent, slightly less than the index weighted by trade alone. At the end of October, the trade and asset weighted index stood 2 percent above its March 1973 level.

Prospects

The OPEC oil ministers meeting scheduled for 20 December will focus on the issue of changing the price of oil. There is little indication that the ministers will seriously consider switching from dollar-denominated oil prices. Even though reports indicate that Kuwait has informed Saudi Arabia of a growing concern over the erosion of real income from currency movements, the impact of world inflation on OPEC earnings still appears to be the primary monetary issue.

The practice of basing oil prices in dollars will probably continue to prove superior to SDR pricing, from the OPEC point of view. Whenever the dollar weakens against other major currencies, however, the issue will reappear. (Confidential)

* * * * *

~~Secret~~



International Energy Biweekly Statistical Review

30 November 1977

ER IOD SS 77-024

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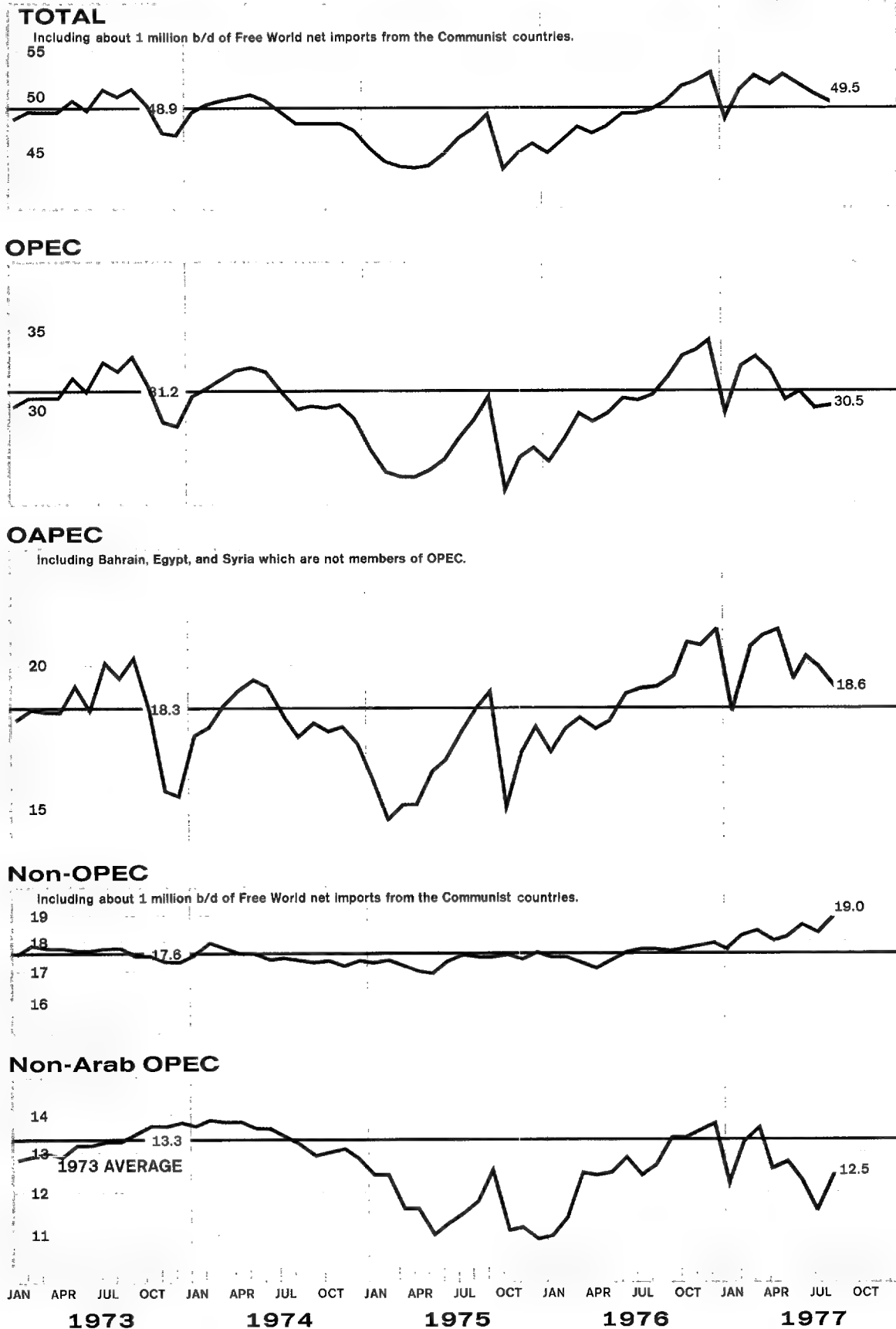
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STATISTICAL REVIEW

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FREE WORLD OIL PRODUCTION¹ MILLION B/D

Semilogarithmic Scale



¹Including natural gas liquids

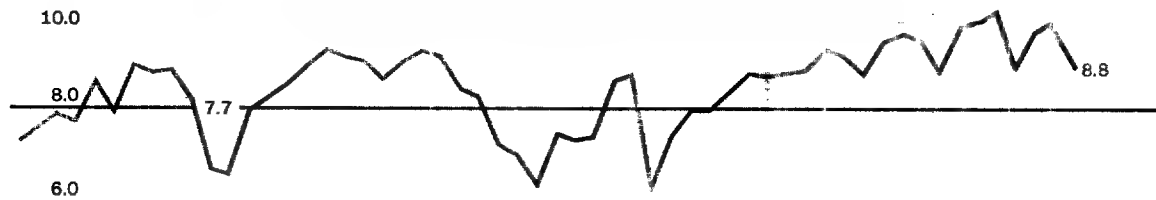
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OPEC OIL PRODUCTION IN MILLION BBL

Saudi Arabia

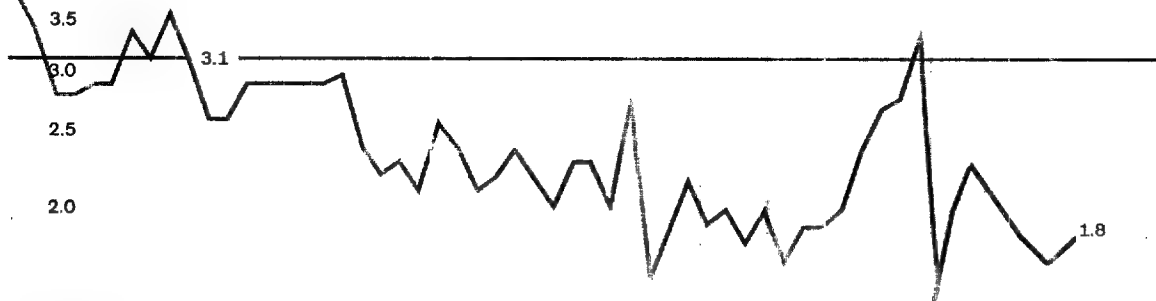
Semilogarithmic Scale

Including about one-half of Neutral Zone production.



Kuwait

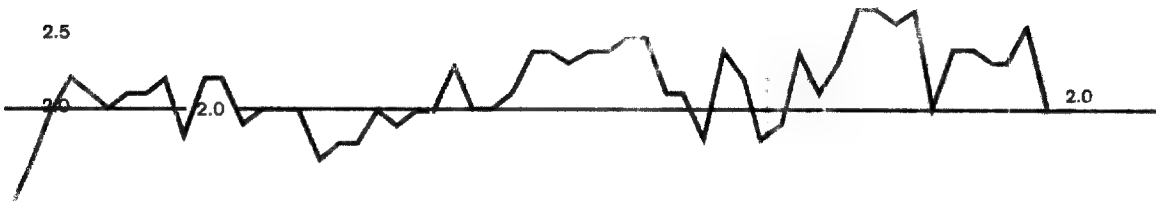
Including about one-half of Neutral Zone production.



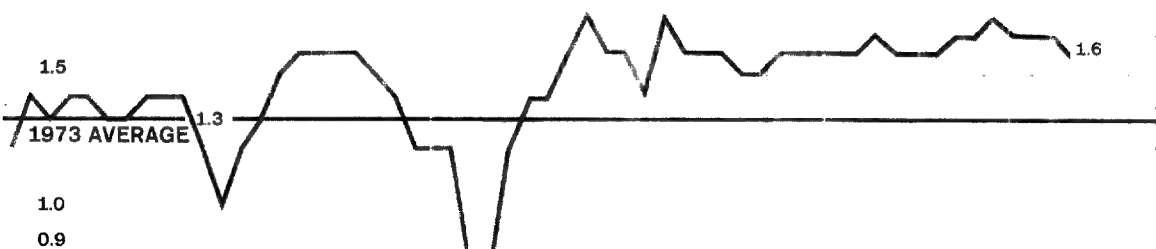
Libya



Iraq

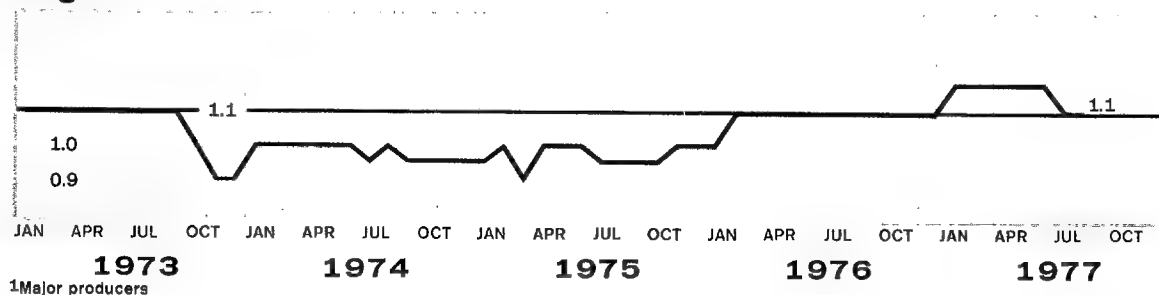


Abu Dhabi



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1973 1974 1975 1976 1977

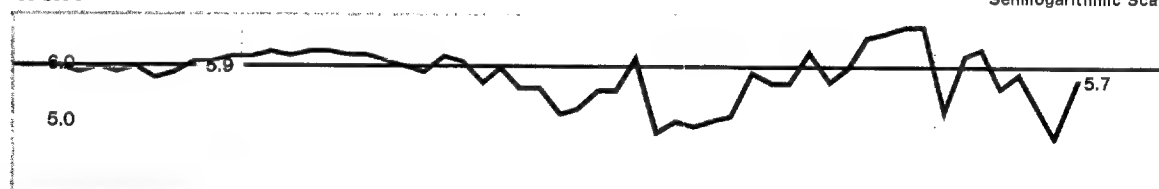
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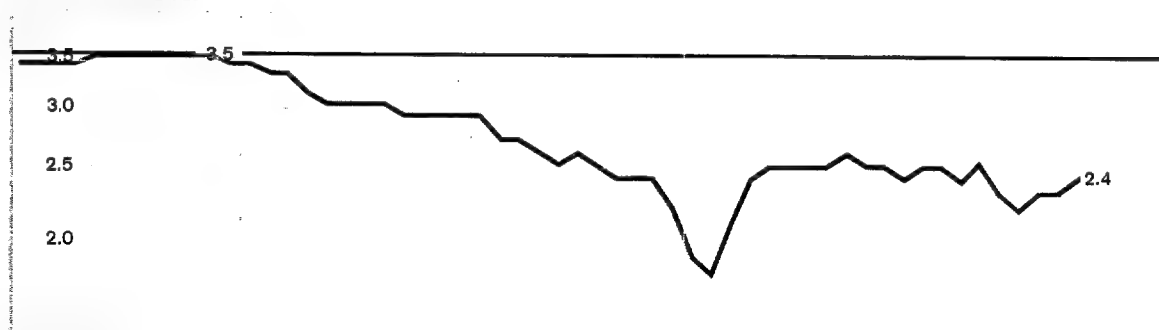
NON-ARAB OPEC OIL PRODUCTION¹ MILLION B/D

Iran

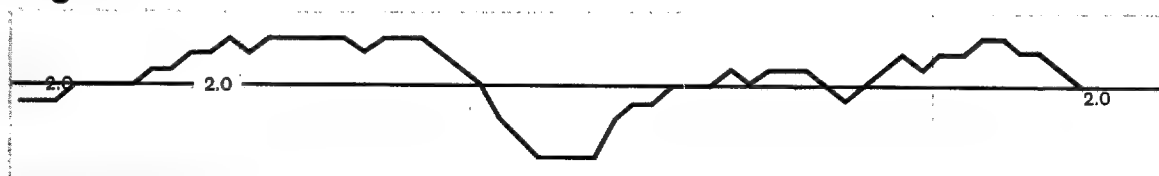
Semilogarithmic Scale



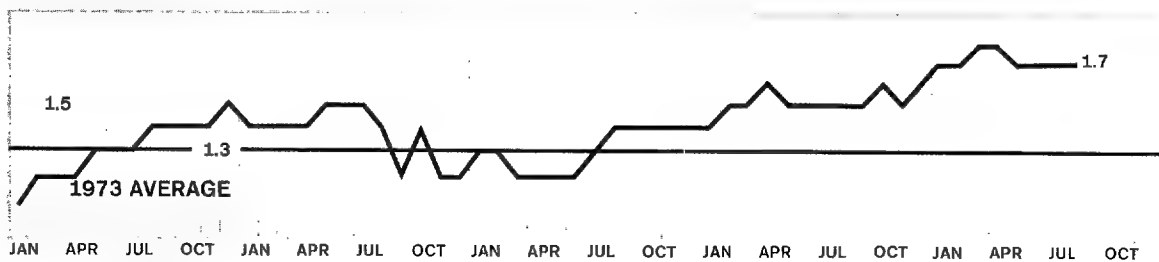
Venezuela



Nigeria



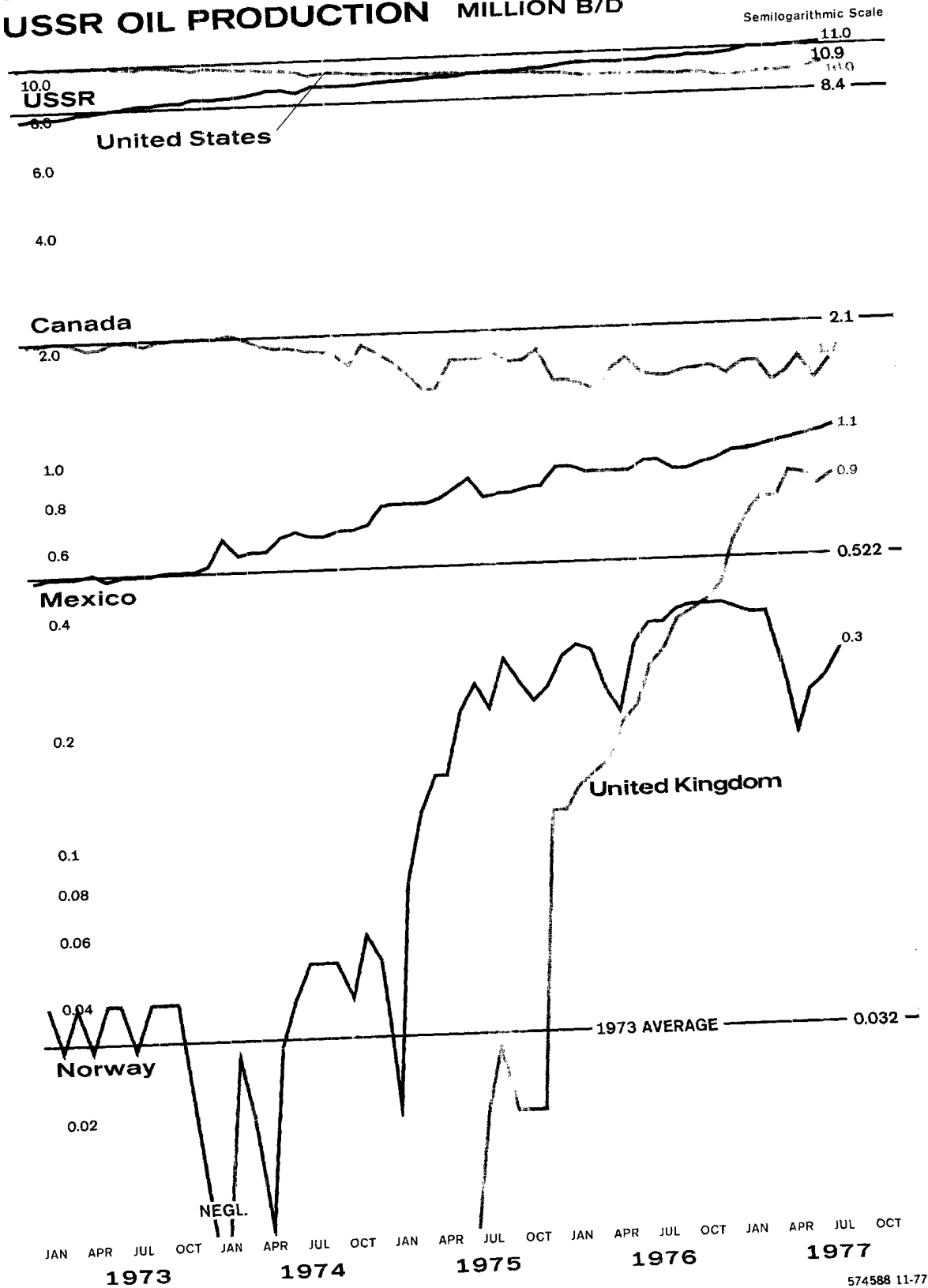
Indonesia



1. Major producers

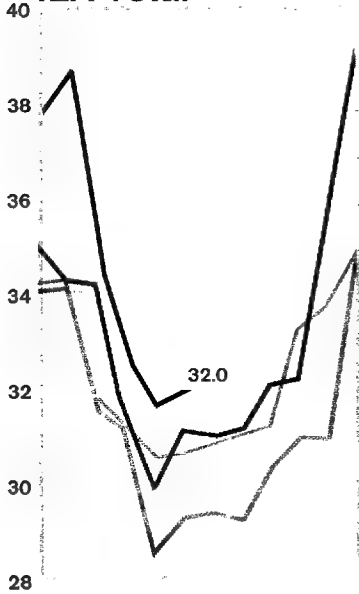
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FREE WORLD AND USSR OIL PRODUCTION MILLION B/D

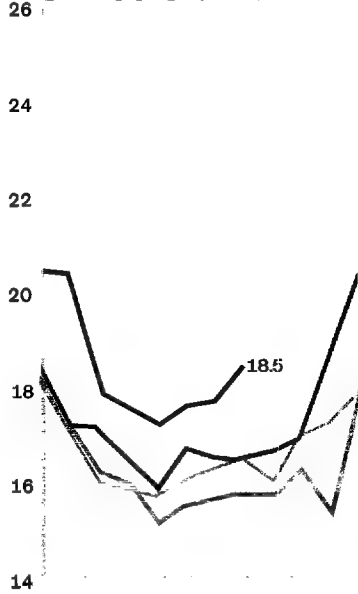


INLAND OIL CONSUMPTION¹ MILLION B/D

IEA Total



United States

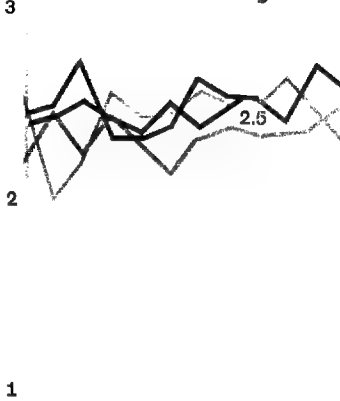


— 1977
— 1976
— 1975
— 1974
— 1973

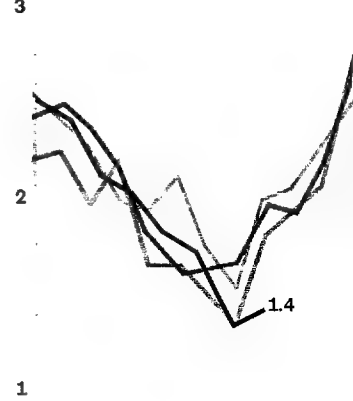
Japan



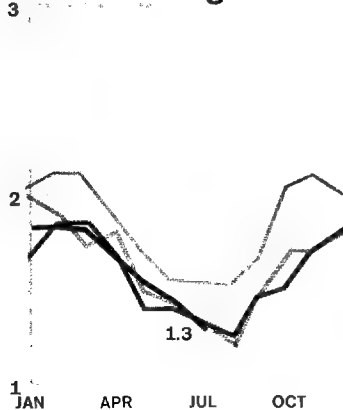
West Germany



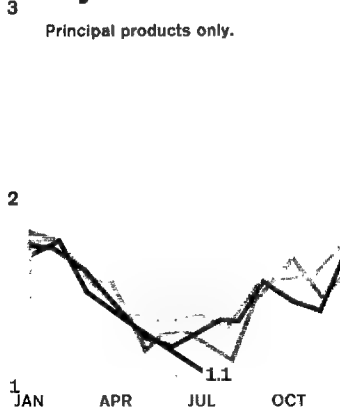
France



United Kingdom

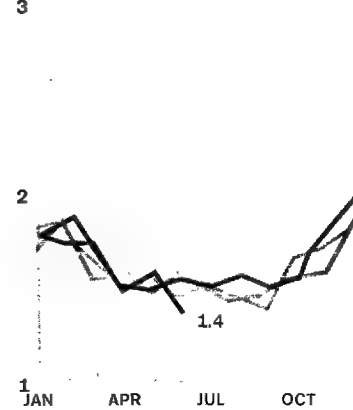


Italy



Principal products only.

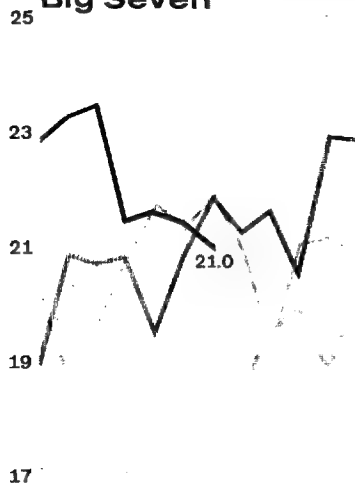
Canada



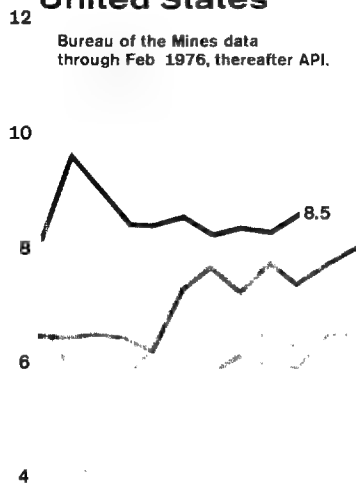
¹Except for the United States, excluding bunkers, refinery fuel, and losses.

NET OIL IMPORTS MILLION B/D

Big Seven

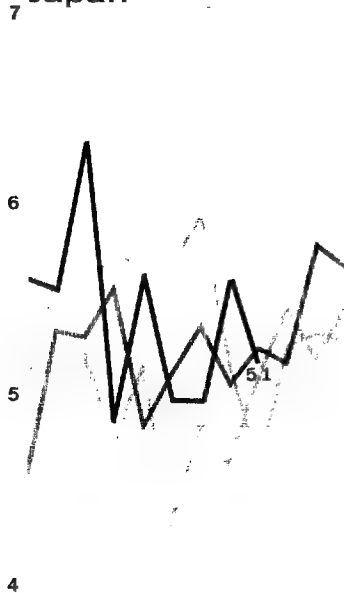


United States

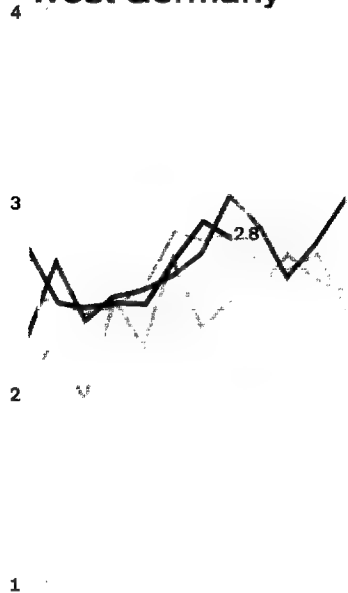


— 1977
— 1976
— 1975
— 1974
— 1973

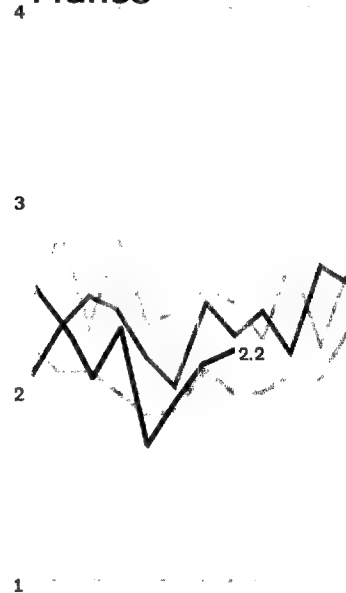
Japan



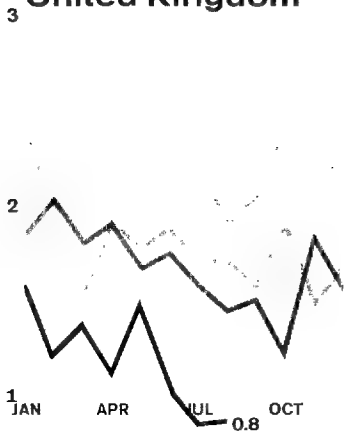
West Germany



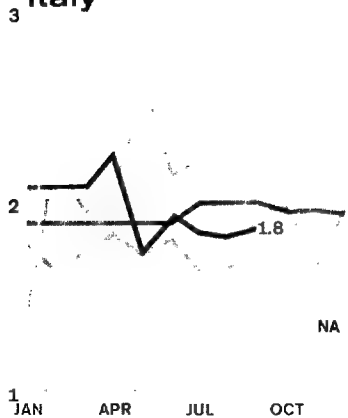
France



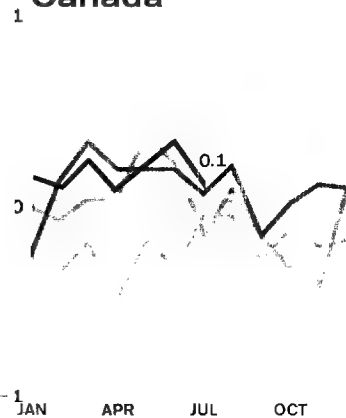
United Kingdom



Italy



Canada



NA

World Crude Oil Production, Excluding Natural Gas Liquids

Thousand b/d

| | 1977 | | | | | | | | |
|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------|
| | 1973 | 1974 | 1975 | 1976 | 1st Qtr | 2d Qtr | Jul | Preliminary | |
| | | | | | | | | Aug | Sep |
| World | 55,755 | 55,875 | 52,990 | 57,350 | 59,130 | 59,200 | 57,910 | 58,700 | |
| Free World | 45,850 | 45,145 | 41,470 | 45,110 | 46,520 | 46,400 | 45,000 | 45,750 | |
| Western hemisphere | 16,145 | 15,290 | 14,135 | 13,820 | 13,850 | 13,740 | 13,860 | 14,400 | |
| United States ¹ | 9,210 | 8,770 | 8,370 | 8,120 | 7,960 | 8,040 | 8,190 | 8,460 | 8,650 |
| Venezuela | 3,365 | 2,975 | 2,345 | 2,290 | 2,350 | 2,170 | 2,200 | 2,280 | |
| Canada ² | 1,800 | 1,695 | 1,460 | 1,300 | 1,320 | 1,280 | 1,130 | 1,320 | 1,210 |
| Mexico ³ | 465 | 580 | 720 | 850 | 910 | 980 | 1,050 | 1,050 | |
| Argentina | 420 | 410 | 390 | 390 | 430 | 430 | 450 | 450 | |
| Ecuador | 210 | 175 | 160 | 190 | 200 | 170 | 150 | 190 | 140 |
| Other | 675 | 685 | 690 | 680 | 680 | 670 | 690 | 650 | |
| Eastern hemisphere | 29,705 | 29,855 | 27,335 | 31,290 | 32,670 | 32,660 | 31,140 | 31,350 | |
| Western Europe | 370 | 380 | 550 | 850 | 1,290 | 1,320 | 1,300 | 1,410 | |
| Norway | 30 | 35 | 190 | 280 | 340 | 200 | 220 | 270 | |
| United Kingdom | Negl. | Negl. | 20 | 240 | 630 | 800 | 770 | 820 | |
| Other | 340 | 345 | 340 | 330 | 320 | 320 | 310 | 320 | |
| Middle East | 21,215 | 21,855 | 19,590 | 22,180 | 22,300 | 22,140 | 21,110 | 21,020 | |
| Saudi Arabia ⁴ | 7,595 | 8,480 | 7,075 | 8,580 | 9,310 | 9,400 | 9,800 | 8,620 | 8,660 |
| Iran | 5,860 | 6,020 | 5,350 | 5,900 | 5,790 | 5,420 | 4,710 | 5,660 | 5,970 |
| Kuwait ⁴ | 3,020 | 2,545 | 2,085 | 2,150 | 1,850 | 1,850 | 1,630 | 1,790 | 2,250 |
| Iraq | 2,020 | 1,970 | 2,260 | 2,420 | 2,230 | 2,330 | 1,900 | 1,900 | 2,100 |
| United Arab Emirates | 1,535 | 1,680 | 1,665 | 1,940 | 2,010 | 2,070 | 2,050 | 1,930 | |
| Abu Dhabi | 1,305 | 1,410 | 1,370 | 1,590 | 1,660 | 1,720 | 1,720 | 1,600 | 1,650 |
| Dubai | 230 | 240 | 255 | 310 | 320 | 320 | 310 | 310 | |
| Sharjah | 0 | 30 | 40 | 40 | 40 | 30 | 20 | 20 | |
| Qatar | 570 | 520 | 440 | 490 | 420 | 410 | 390 | 500 | 340 |
| Oman | 295 | 290 | 340 | 370 | 370 | 350 | 330 | 330 | |
| Syria | 100 | 120 | 185 | 200 | 200 | 190 | 180 | 180 | |
| Other | 220 | 230 | 190 | 130 | 120 | 120 | 120 | 110 | |
| Africa | 5,900 | 5,370 | 4,980 | 5,790 | 6,330 | 6,420 | 5,940 | 6,140 | |
| Nigeria | 2,055 | 2,255 | 1,785 | 2,070 | 2,220 | 2,240 | 2,060 | 2,020 | |
| Libya | 2,175 | 1,520 | 1,480 | 1,930 | 2,130 | 2,150 | 1,890 | 2,130 | |
| Algeria | 1,070 | 960 | 960 | 990 | 1,070 | 1,060 | 1,000 | 1,000 | |
| Gabon | 150 | 200 | 225 | 220 | 220 | 220 | 230 | 230 | 230 |
| Egypt | 165 | 145 | 250 | 330 | 370 | 430 | 440 | 440 | |
| Angola/Cabinda | 160 | 170 | 140 | 110 | 170 | 160 | 160 | 160 | |
| Other | 125 | 120 | 140 | 140 | 150 | 160 | 160 | 160 | |
| Asia-Pacific | 2,220 | 2,250 | 2,215 | 2,470 | 2,750 | 2,780 | 2,790 | 2,780 | |
| Australia | 370 | 390 | 410 | 420 | 430 | 430 | 440 | 440 | |
| Indonesia | 1,340 | 1,375 | 1,305 | 1,500 | 1,690 | 1,700 | 1,690 | 1,680 | 1,670 |
| Malaysia-Brunei | 320 | 290 | 300 | 330 | 380 | 400 | 410 | 410 | |
| Other | 190 | 195 | 200 | 220 | 250 | 250 | 250 | 250 | |
| Communist Countries | 9,905 | 10,730 | 11,520 | 12,240 | 12,610 | 12,800 | 12,910 | 12,950 | |
| USSR | 8,420 | 9,020 | 9,630 | 10,170 | 10,510 | 10,660 | 10,740 | 10,780 | |
| China | 1,090 | 1,310 | 1,490 | 1,670 | 1,700 | 1,740 | 1,770 | 1,770 | |
| Romania | 285 | 290 | 290 | 290 | 290 | 290 | 290 | 290 | |
| Other | 110 | 110 | 110 | 110 | 110 | 110 | 110 | 110 | |

¹ Natural gas liquids amounted to an estimated 1.6 million b/d in Sep.² Natural gas liquids amounted to an estimated 340,000 b/d in Sep.³ Natural gas liquids amounted to an estimated 95,000 b/d in Aug.⁴ Including about one-half of Neutral Zone crude oil production, which amounted to about 320,000 b/d in Sep.

Thousand b/d

| | 1973 | 1974 | 1975 | 1976 | 1977 | | | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | | | | | 1st Qtr | 2d Qtr | Jul | Aug | Sep |
| Free World ¹ | 48,975 | 48,565 | 44,970 | 48,945 | 50,260 | 50,150 | 48,830 | 49,610 | |
| Non-OPEC Producers ¹ | 17,665 | 17,505 | 17,425 | 17,780 | 18,190 | 18,360 | 18,420 | 18,990 | |
| United States | 10,950 | 10,460 | 10,000 | 9,725 | 9,540 | 9,620 | 9,770 | 10,040 | 10,230 |
| Canada | 2,120 | 2,005 | 1,770 | 1,620 | 1,660 | 1,620 | 1,470 | 1,660 | 1,550 |
| United Kingdom | Negl. | Negl. | 25 | 285 | 680 | 850 | 820 | 870 | |
| Norway | 30 | 35 | 195 | 300 | 375 | 235 | 255 | 305 | |
| Mexico | 535 | 660 | 800 | 935 | 995 | 1,055 | 1,095 | 1,145 | |
| Other ² | 3,530 | 3,545 | 3,735 | 3,815 | 4,040 | 4,080 | 4,110 | 4,070 | |
| OPEC | 31,310 | 31,060 | 27,545 | 31,165 | 32,070 | 31,790 | 30,410 | 30,620 | 31,390 |
| Saudi Arabia ³ | 7,685 | 8,610 | 7,215 | 8,760 | 9,510 | 9,600 | 10,000 | 8,830 | 8,890 |
| Kuwait ³ | 3,080 | 2,595 | 2,135 | 2,200 | 1,910 | 1,910 | 1,690 | 1,850 | 2,340 |
| Libya | 2,210 | 1,540 | 1,510 | 1,970 | 2,165 | 2,185 | 1,925 | 2,165 | 2,065 |
| Iraq | 2,020 | 1,970 | 2,260 | 2,415 | 2,235 | 2,335 | 2,005 | 2,005 | 2,305 |
| United Arab Emirates | 1,535 | 1,680 | 1,665 | 1,935 | 2,020 | 2,080 | 2,060 | 1,940 | 2,000 |
| Abu Dhabi | 1,305 | 1,410 | 1,370 | 1,585 | 1,670 | 1,730 | 1,730 | 1,610 | 1,660 |
| Dubai | 230 | 240 | 255 | 310 | 310 | 320 | 310 | 310 | 320 |
| Sharjah | 0 | 30 | 40 | 40 | 40 | 30 | 20 | 20 | 20 |
| Algeria | 1,100 | 1,010 | 1,020 | 1,075 | 1,170 | 1,160 | 1,100 | 1,100 | 1,050 |
| Qatar | 570 | 525 | 450 | 505 | 430 | 420 | 400 | 510 | 350 |
| Iran | 5,900 | 6,065 | 5,395 | 5,930 | 5,840 | 5,470 | 4,760 | 5,710 | 6,020 |
| Venezuela | 3,455 | 3,060 | 2,420 | 2,370 | 2,430 | 2,250 | 2,310 | 2,360 | 2,440 |
| Nigeria | 2,055 | 2,255 | 1,785 | 2,070 | 2,220 | 2,240 | 2,060 | 2,020 | 1,860 |
| Indonesia | 1,340 | 1,375 | 1,305 | 1,525 | 1,720 | 1,730 | 1,720 | 1,710 | 1,700 |
| Gabon | 150 | 200 | 225 | 225 | 220 | 220 | 230 | 230 | 230 |
| Ecuador | 210 | 175 | 160 | 185 | 200 | 190 | 150 | 190 | 140 |

¹ Free World and Non-OPEC Producers totals include net Communist imports of about 500,000 b/d in 1973, 800,000 b/d in 1974, 900,000 b/d in 1975, 1,100,000 b/d in 1976, and 900,000 b/d in 1977.

² Including Bahrain, Egypt, and Syria.

³ Including about one-half of Neutral Zone production.

World Natural Gas Liquids (NGL) Production ¹

Thousand b/d

| | 1973 | 1974 | 1975 | 1976 | 1977 | | 1973 | 1974 | 1975 | 1976 | 1977 |
|--------------------|--------------|--------------|--------------|--------------|--------------|----------------------------|------------|------------|------------|------------|------------|
| World | 2,845 | 2,860 | 2,855 | 2,995 | 3,095 | Middle East | 190 | 230 | 245 | 295 | 335 |
| Free World | 2,625 | 2,620 | 2,600 | 2,730 | 2,820 | Saudi Arabia | 90 | 130 | 140 | 185 | 200 |
| OPEC | 345 | 385 | 410 | 515 | 580 | Iran | 40 | 45 | 45 | 45 | 50 |
| Non-OPEC | 2,280 | 2,235 | 2,190 | 2,215 | 2,240 | Kuwait | 60 | 50 | 50 | 55 | 60 |
| Western Hemisphere | 2,275 | 2,220 | 2,150 | 2,140 | 2,150 | Qatar | 0 | 5 | 10 | 10 | 10 |
| United States | 1,740 | 1,690 | 1,630 | 1,605 | 1,580 | Abu Dhabi | 0 | 0 | 0 | 0 | 10 |
| Venezuela | 90 | 85 | 75 | 75 | 80 | Iraq | 0 | 0 | 0 | 0 | 5 |
| Canada | 320 | 310 | 310 | 320 | 340 | Africa | 65 | 70 | 90 | 125 | 135 |
| Mexico | 70 | 80 | 80 | 85 | 95 | Libya | 35 | 20 | 30 | 35 | 35 |
| Other | 55 | 55 | 55 | 55 | 55 | Algeria | 30 | 50 | 60 | 90 | 100 |
| Eastern Hemisphere | 350 | 400 | 450 | 590 | 670 | Asia-Pacific | 60 | 65 | 70 | 95 | 110 |
| Western Europe | 35 | 35 | 45 | 95 | 120 | Australia | 50 | 50 | 50 | 55 | 60 |
| Norway | 0 | 0 | 5 | 20 | 35 | Indonesia | 0 | 0 | 0 | 20 | 30 |
| United Kingdom | 0 | 0 | 15 | 40 | 50 | Other | 10 | 15 | 20 | 20 | 20 |
| Other | 35 | 35 | 35 | 35 | 35 | Communist Countries | 220 | 240 | 255 | 265 | 275 |
| | | | | | | USSR | 210 | 230 | 240 | 250 | 260 |
| | | | | | | China | N.A. | N.A. | N.A. | N.A. | N.A. |
| | | | | | | Other | 10 | 10 | 15 | 15 | 15 |

¹ Estimated.

Thousand b/d

| | 1977 | | | | | | | | |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | 1973 | 1974 | 1975 | 1976 | 1st Qtr | 2d Qtr | Jul | Preliminary | |
| | | | | | | | | Aug | Sep |
| Total OAPEC (thousand b/d) | 18,090 | 17,735 | 16,165 | 18,730 | 19,300 | 19,600 | 19,110 | 18,320 | |
| % change from Sep 1973 ³ | | -11 | -19 | -7 | -4 | -2 | -5 | -9 | |
| % change from Dec 1976 ⁴ | | | | | -8 | -7 | -9 | -13 | |
| Total OPEC (thousand b/d) | 30,965 | 30,675 | 27,135 | 30,655 | 31,490 | 31,210 | 29,830 | 30,040 | 30,980 |
| % change from Sep 1973 ³ | | -7 | -18 | -7 | -4 | -5 | -9 | -9 | -6 |
| % change from Dec 1976 ⁴ | | | | | -8 | -8 | -12 | -12 | -9 |

¹ The members of the Organization of Arab Petroleum Exporting Countries are Abu Dhabi, Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, and Syria.

² The membership of the Organization of Petroleum Exporting Countries consists of OAPEC members (excluding Bahrain, Egypt, and Syria), plus Dubai, Ecuador, Gabon, Indonesia, Iran, Nigeria, Sharjah, and Venezuela.

³ In Sep 1973, the pre-crisis level of output, OAPEC countries produced 20,038 b/d and OPEC countries 32,956 b/d.

⁴ In Dec 1976, the post-crisis peak of output, OAPEC countries produced 21,060 b/d and OPEC countries 34,070 b/d.

OAPEC and OPEC Countries: Crude Oil Production Capacity

Thousand b/d

| | Estimated Productive Capacity ¹ | Underutilization of Productive Capacity | |
|-------------------------------|--|---|--------------|
| | | Aug | Sep |
| Saudi Arabia ² | 10,500 | 1,870 | 1,810 |
| Kuwait ² | 3,500 | 1,710 | 1,220 |
| Libya | 2,500 | 370 | 470 |
| Iraq | 3,000 | 1,000 | 700 |
| Abu Dhabi | 2,000 | 400 | 350 |
| Algeria | 1,080 | 80 | 130 |
| Qatar | 700 | 200 | 360 |
| Egypt | 450 | 10 | |
| Syria | 200 | 20 | 20 |
| Bahrain | 60 | 10 | 10 |
| Total OAPEC | 23,990 | 5,670 | |
| Iran | 6,700 | 1,040 | 730 |
| Venezuela | 2,600 | 320 | 240 |
| Nigeria | 2,300 | 280 | 270 |
| Indonesia | 1,800 | 120 | 130 |
| Dubai | 340 | 30 | 20 |
| Gabon | 250 | 20 | 20 |
| Ecuador | 225 | 35 | 85 |
| Sharjah | 50 | 30 | 30 |
| Total OPEC³ | 37,545 | 7,505 | 6,565 |

¹ Estimated at maximum efficient rate (MER) of production. In some cases output can exceed the MER for short periods of time without damaging the fields.

² Including about one-half of Neutral Zone capacity production.

³ OAPEC members (excluding Bahrain, Egypt, and Syria), plus the other countries shown.

Any estimate of oil and natural gas reserves must be treated as rough approximation. Few countries publish official reserve estimates, and there is no consistent rigorous definition of reserves. Moreover, the volume of oil and/or gas in place, even in a well-delineated field, can never be precisely accurate; estimates of commercially recoverable oil and natural gas are usually made not by reference to existing technology but by reference to the production system currently in use, and even this can provide only an approximation. Assessments of proved reserves therefore do not mean absolute world availability; they are only an indication of the quantity of oil that is technically and economically feasible to extract with current techniques at current prices.

CIA's reserve figures are for *proved and probable* reserves and are based on the best available published information and on our own judgemental analysis in cases where we have unique information. CIA uses the restrictive definition of *probable* reserves (as differentiated from *possible* reserves) common in the industry. Our *proved and probable* figure does not differ greatly from the *proved* figure in many cases, such as Venezuela, Iran, and Libya. In these countries, extensive exploration has taken place and extensions of known fields are considered unlikely. In other cases—such as Saudi Arabia, Mexico, and the United Kingdom—differences between *proved* and *proved and probable* reserves are considerably larger.

Estimated Proved and Probable Petroleum Reserves

| Area and Country | Crude Oil Billion Barrels | Natural Gas Trillion Cubic Feet | Area and Country | Crude Oil Billion Barrels | Natural Gas Trillion Cubic Feet |
|----------------------------|---------------------------------|--|----------------------------|---------------------------------|--|
| | | | | | |
| World | 665 | 2,626¹ | Africa | 59 | 211 |
| Free World | 600 | 1,764 | Libya | 25 | 25 |
| Western Hemisphere | 96 | 426 | Nigeria | 19 | 46 |
| United States ² | 39 | 219 | Algeria | 7 | 127 |
| Mexico | 25 | 43 | Egypt | 4 | 3 |
| Venezuela | 14 | 43 | Gabon | 1 | Negl. |
| Canada ² | 8 | 71 | Angola-Cabinda | 1 | Negl. |
| Ecuador | 2 | 11 | Tunisia | 1 | 7 |
| Argentina | 2 | 11 | Other | 1 | 3 |
| Brazil | 1 | 7 | Western Europe | 31 | 177 |
| Colombia | 1 | 7 | United Kingdom | 20 | 46 |
| Peru | 2 | 7 | Norway | 8 | 25 |
| Trinidad and Tobago | 2 | 7 | Netherlands | Negl. | 71 |
| Eastern Hemisphere | 504 | 1,338 | Spain | 1 | Negl. |
| Middle East | 392 | 845 | Other | 2 | 35 |
| Saudi Arabia | 158 | 106 | Asia-Pacific | 22 | 105 |
| Kuwait | 71 | 35 | Indonesia | 14 | 21 |
| Iran ³ | 60 | 600 | Brunei | 2 | 11 |
| Iraq | 36 | 35 | Malaysia | 2 | 14 |
| United Arab Emirates | 34 | 35 | Australia | 2 | 35 |
| Neutral Zone | 17 | 7 | India | 2 | 3 |
| Qatar | 7 | 18 | Pakistan | Negl. | 21 |
| Oman | 6 | 3 | Communist Countries | 65 | 862 |
| Syria | 2 | 3 | USSR | 40 | 812 |
| Other | 1 | 3 | China | 20 | 25 |
| | | | Other | 5 | 25 |

¹ Equivalent to 470 billion barrels of oil.

² Including Arctic gas deposits and natural gas liquids.

³ Including recent discoveries.

Estimated Imports of Crude Oil and Refined Products
1976

Thousand b/d

| | US ¹ | Japan | Canada | Western Europe | West Germany | France | UK | Italy | Netherlands | Belgium/Luxembourg | Spain | Other Western Europe |
|-------------------------------|-----------------|--------------|------------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------------|------------|----------------------|
| Algeria | 437 | 2 | 14 | 443 | 213 | 94 | 19 | 70 | 3 | 3 | 28 | 13 |
| Bahrain | 3 | 32 | 0 | 8 | 1 | 0 | 6 | 0 | 1 | 0 | 0 | 0 |
| Egypt | 17 | 1 | 2 | 141 | 1 | 13 | 8 | 0 | 11 | 1 | 0 | 107 |
| Iraq | 38 | 128 | 33 | 1,222 | 35 | 327 | 105 | 318 | 34 | 1 | 87 | 315 |
| Kuwait | 9 | 450 | 6 | 702 | 38 | 86 | 229 | 13 | 111 | 8 | 58 | 159 |
| Libya | 532 | 41 | 25 | 1,135 | 424 | 63 | 57 | 237 | 12 | 0 | 89 | 253 |
| Qatar | 69 | 6 | 0 | 300 | 24 | 58 | 94 | 22 | 50 | 0 | 0 | 52 |
| Saudi Arabia | 1,371 | 1,719 | 122 | 3,445 | 379 | 877 | 370 | 516 | 354 | 293 | 376 | 280 |
| Syria | 1 | 0 | 0 | 107 | 23 | 53 | 3 | 0 | 0 | 28 | 0 | 0 |
| United Arab Emirates | 319 | 530 | 16 | 789 | 138 | 234 | 74 | 20 | 115 | 26 | 0 | 182 |
| Total OAPEC | 2,796 | 2,909 | 218 | 8,292 | 1,276 | 1,805 | 965 | 1,196 | 691 | 360 | 638 | 1,361 |
| Ecuador | 63 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gabon | 46 | 0 | 12 | 65 | 11 | 29 | 1 | 0 | 3 | 0 | 21 | 0 |
| Indonesia | 573 | 613 | 0 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Iran | 548 | 974 | 162 | 2,440 | 383 | 291 | 399 | 290 | 327 | 73 | 179 | 498 |
| Nigeria | 1,124 | 17 | 36 | 723 | 181 | 155 | 76 | 16 | 195 | 30 | 0 | 70 |
| Venezuela | 985 | 6 | 302 | 238 | 38 | 36 | 41 | 26 | 11 | 3 | 23 | 60 |
| Total OPEC² | 6,114 | 4,486 | 730 | 11,509 | 1,867 | 2,250 | 1,465 | 1,528 | 1,215 | 437 | 861 | 1,886 |
| Canada | 599 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Mexico | 91 | 0 | 0 | Negl. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Negl. |
| Other | 470 | 716 | 24 | 1,757 ^{3,4} | 917 | 282 | 570 | 740 | 208 | 288 | 123 | 897 |
| Total | 7,295 | 5,235 | 756 | 13,528 | 2,809 | 2,598 | 2,052 | 2,268 | 1,435 | 754 | 984 | 2,896 |

¹ Products traced to source of crude oil.

² OAPEC members excluding Bahrain, Egypt, and Syria plus other countries shown.

³ Because of intra-European trade, components do not add to the totals shown.

⁴ Other and unknown.

Selected Developed Countries: Crude Oil Imports, by Source

| | Thousand b/d | | | | | | | Percent of Total | |
|-----------------------------------|---------------------------------------|-------|-------|-------|------------|-------|-------|------------------|-------------|
| | Sep 1973 (Pre- Crisis Level) | 1974 | 1975 | 1976 | 1977 | | | | |
| | | | | | 1st Qtr | Apr | May | Sep 1973 | May 1977 |
| United States | | | | | | | | | |
| Algeria | 124 | 180 | 264 | 408 | 527 | 654 | 381 | 3.6 | 5.6 |
| Egypt | 0 | 9 | 5 | 17 | 12 | 16 | 82 | 0 | 1.2 |
| Iraq | 17 | 0 | 2 | 26 | 28 | 52 | 168 | 0.5 | 2.5 |
| Kuwait | 44 | 5 | 4 | 1 | 64 | 67 | 51 | 1.3 | 0.7 |
| Libya | 153 | 4 | 223 | 444 | 641 | 776 | 749 | 4.4 | 11.0 |
| Qatar | 41 | 17 | 18 | 24 | 39 | 34 | 94 | 1.2 | 1.4 |
| Saudi Arabia | 599 | 438 | 701 | 1,222 | 1,371 | 1,429 | 1,716 | 17.3 | 25.2 |
| United Arab Emirates ¹ | 88 | 69 | 117 | 255 | 335 | 324 | 237 | 2.5 | 3.5 |
| Other ² | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Total OAPEC | 1,066 | 722 | 1,334 | 2,397 | 3,024 | 3,352 | 3,478 | 30.7 | 51.0 |
| Ecuador | 33 | 42 | 57 | 51 | 51 | 53 | 77 | 0.9 | 1.1 |
| Gabon | 0 | 23 | 27 | 26 | 37 | 26 | 42 | 0 | 0.6 |
| Indonesia | 249 | 284 | 379 | 536 | 565 | 474 | 480 | 7.2 | 7.0 |
| Iran | 205 | 463 | 278 | 298 | 518 | 517 | 535 | 5.9 | 7.8 |
| Nigeria | 409 | 697 | 746 | 1,014 | 1,278 | 1,238 | 1,060 | 11.8 | 15.5 |
| Venezuela | 405 | 319 | 395 | 241 | 173 | 285 | 251 | 11.7 | 3.7 |
| Total OPEC ³ | 2,367 | 2,541 | 3,211 | 4,546 | 5,628 | 5,929 | 5,841 | 68.2 | 85.6 |
| Canada | 998 | 791 | 600 | 371 | 282 | 313 | 248 | 28.8 | 3.6 |
| Mexico | 8 | 2 | 70 | 87 | 144 | 145 | 174 | 0.2 | 2.6 |
| UK | 0 | 0 | Negl. | 13 | 86 | 35 | 50 | 0 | 0.7 |
| Norway | 0 | 1 | 12 | 35 | 54 | 0 | 59 | 0 | 0.9 |
| Other | 98 | 133 | 207 | 218 | 308 | 347 | 367 | 2.8 | 5.4 |
| Total | 3,471 | 3,477 | 4,105 | 5,287 | 6,520 | 6,785 | 6,821 | 100.0 | 100.0 |

| | Thousand b/d | | | | | | | Percent of Total | |
|-----------------------------------|------------------|------|-------|------|------------|-----------|------|------------------|-------------|
| | Sep 1973 | | | | | | 1977 | | |
| | (Pre- | | | | | | | | |
| | Crisis Level) | 1974 | 1975 | 1976 | 1st Qtr | 2d Qtr | Jul | Sep 1973 | Jul 1977 |
| Canada | | | | | | | | | |
| Algeria | 0 | 12 | Negl. | 0 | 0 | 0 | 0 | 0 | 0 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iraq | 23 | 10 | 31 | 29 | 17 | 6 | 36 | 2.4 | 5.9 |
| Kuwait | 0 | 25 | 29 | 2 | 0 | 0 | 0 | 0 | 0 |
| Libya | 56 | 9 | 9 | 20 | 0 | 0 | 0 | 6.0 | 0 |
| Qatar | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| Saudi Arabia | 82 | 91 | 165 | 109 | 188 | 168 | 145 | 8.7 | 23.6 |
| United Arab Emirates ¹ | 48 | 24 | 46 | 57 | 4 | 11 | 1 | 5.2 | 0.2 |
| Other ² | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total OAPEC | 210 | 171 | 282 | 217 | 209 | 185 | 182 | 22.3 | 29.6 |
| Ecuador | 13 | 6 | 1 | 0 | 0 | 0 | 0 | 1.4 | 0 |
| Gabon | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iran | 149 | 199 | 202 | 157 | 145 | 126 | 94 | 15.9 | 15.3 |
| Nigeria | 39 | 14 | 17 | 28 | 11 | 7 | 0 | 4.1 | 0 |
| Venezuela | 485 | 351 | 265 | 269 | 263 | 262 | 215 | 51.6 | 35.0 |
| Total OPEC ³ | 896 | 741 | 770 | 671 | 628 | 580 | 491 | 95.3 | 80.0 |
| Other | 44 | 79 | 54 | 49 | 83 | 109 | 123 | 4.7 | 20.0 |
| Total | 940 | 820 | 824 | 720 | 711 | 689 | 614 | 100.0 | 100.0 |

Selected Developed Countries: Crude Oil Imports, by Source
(Continued)

| Thousand b/d | | | | | | | | | | | |
|--|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|--------------|
| | Sep 1973 (Pre- Crisis Level) | 1977 | | | | | | | | Percent of Total | |
| | | 1974 | 1975 | 1976 | 1st Qtr | 2d Qtr | Jul | Aug | Sep | Sep 1973 | Sep 1977 |
| Japan | | | | | | | | | | | |
| Algeria | 0 | 5 | 6 | 0 | 0 | 4 | 0 | 11 | 0 | 0 | 0 |
| Egypt | 0 | 2 | 0 | Negl. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iraq | 0 | 40 | 92 | 127 | 162 | 162 | 318 | 132 | 59 | 0 | 1.3 |
| Kuwait | 488 | 479 | 416 | 342 | 350 | 399 | 255 | 403 | 513 | 10.0 | 11.5 |
| Libya | 31 | 70 | 59 | 41 | 11 | 35 | 13 | 21 | 13 | 0.6 | 0.3 |
| Qatar | 0 | 6 | 3 | 2 | 28 | 21 | 0 | 51 | 30 | 0 | 0.7 |
| Saudi Arabia | 1,148 | 1,304 | 1,355 | 1,572 | 1,846 | 1,429 | 1,445 | 1,723 | 1,407 | 23.5 | 31.6 |
| United Arab Emir- ates ¹ | 511 | 533 | 408 | 530 | 586 | 494 | 486 | 579 | 493 | 10.5 | 11.1 |
| Other ² | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total OAPEC | 2,181 | 2,439 | 2,339 | 2,614 | 2,983 | 2,544 | 2,517 | 2,920 | 2,515 | 44.7 | 56.5 |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gabon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indonesia | 688 | 671 | 518 | 553 | 669 | 665 | 628 | 706 | 654 | 13.1 | 14.7 |
| Iran | 1,554 | 1,222 | 1,147 | 928 | 957 | 771 | 666 | 824 | 729 | 31.9 | 16.4 |
| Nigeria | 101 | 87 | 71 | 17 | 0 | 0 | 0 | 0 | 0 | 2.1 | 0 |
| Venezuela | 7 | 9 | 5 | 6 | 7 | 7 | 7 | 0 | 10 | 0.1 | 0.2 |
| Total OPEC³ | 4,481 | 4,426 | 4,080 | 4,118 | 4,616 | 3,987 | 3,818 | 4,450 | 3,908 | 91.9 | 87.8 |
| Other | 397 | 370 | 459 | 483 | 568 | 485 | 580 | 490 | 542 | 8.1 | 12.2 |
| Total | 4,878 | 4,798 | 4,539 | 4,601 | 5,184 | 4,472 | 4,398 | 4,940 | 4,450 | 100.0 | 100.0 |

| Thousand b/d | | | | | | | | | | |
|-------------------------------|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|--------------|
| | Sep 1973 (Pre- Crisis Level) | 1977 | | | | | | | Percent of Total | |
| | | 1974 | 1975 | 1976 | 1st Qtr | 2nd Qtr | Jul | Aug | Sep 1973 | Aug 1977 |
| United Kingdom | | | | | | | | | | |
| Abu Dhabi | 28 | 86 | 47 | 29 | 35 | 44 | 45 | 41 | 1.5 | 3.2 |
| Algeria | 46 | 10 | 29 | 18 | 14 | 8 | 12 | 12 | 2.4 | 1.0 |
| Egypt | 0 | 5 | 16 | 3 | 0 | 11 | 37 | 0 | 0 | 0 |
| Iraq | 67 | 64 | 52 | 105 | 114 | 110 | 50 | 80 | 3.5 | 6.3 |
| Kuwait | 293 | 343 | 218 | 229 | 181 | 217 | 183 | 147 | 15.3 | 11.6 |
| Libya | 98 | 175 | 53 | 45 | 20 | 50 | 62 | 32 | 5.1 | 2.5 |
| Qatar | 73 | 96 | 77 | 94 | 78 | 24 | 34 | 20 | 3.8 | 1.6 |
| Saudi Arabia | 530 | 712 | 444 | 370 | 405 | 457 | 361 | 275 | 27.6 | 21.8 |
| Other ² | 0 | 0 | 16 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total OAPEC | 1,135 | 1,491 | 952 | 896 | 847 | 921 | 784 | 607 | 59.2 | 48.1 |
| Dubai | 48 | 26 | 30 | 45 | 36 | 36 | 14 | 74 | 2.5 | 5.9 |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gabon | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iran | 317 | 290 | 351 | 398 | 414 | 269 | 145 | 243 | 16.5 | 19.2 |
| Nigeria | 188 | 158 | 117 | 76 | 70 | 13 | 16 | 18 | 9.8 | 1.4 |
| Sharjah | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Venezuela | 66 | 66 | 64 | 29 | 16 | 22 | 18 | 33 | 3.4 | 2.6 |
| Total OPEC³ | 1,754 | 2,040 | 1,482 | 1,438 | 1,383 | 1,250 | 940 | 975 | 91.5 | 77.2 |
| Other | 163 | 226 | 261 | 326 | 263 | 240 | 170 | 288 | 8.5 | 22.8 |
| Total | 1,917 | 2,271 | 1,775 | 1,770 | 1,646 | 1,501 | 1,147 | 1,263 | 100.0 | 100.0 |

Selected Developed Countries: Crude Oil Imports, by Source
(Continued)

| | Thousand b/d | | | | | | | Percent of Total | |
|-----------------------------------|---------------------------------------|-------|-------|-------|------------|-----------|-------|------------------|-------------|
| | Sep 1973 (Pre- Crisis Level) | 1974 | 1975 | 1976 | 1st Qtr | 2d Qtr | Jul | | |
| | | | | | | | | Sep 1973 | Jul 1977 |
| West Germany | | | | | | | | | |
| Algeria | 239 | 201 | 204 | 210 | 227 | 164 | 215 | 10.4 | 10.5 |
| Egypt | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iraq | 43 | 73 | 28 | 35 | 31 | 21 | 0 | 1.9 | 0 |
| Kuwait | 102 | 82 | 54 | 25 | 24 | 16 | 0 | 4.4 | 0 |
| Libya | 418 | 320 | 296 | 421 | 470 | 354 | 408 | 18.2 | 20.0 |
| Qatar | 18 | 20 | 25 | 24 | 13 | 24 | 0 | 0.8 | 0 |
| Saudi Arabia | 710 | 514 | 371 | 378 | 376 | 404 | 545 | 30.9 | 26.7 |
| United Arab Emirates ¹ | 162 | 169 | 158 | 125 | 155 | 156 | 140 | 7.1 | 6.9 |
| Other ² | 26 | 19 | 16 | 25 | 22 | 25 | 26 | 1.1 | 1.3 |
| Total OAPEC | 1,718 | 1,398 | 1,156 | 1,243 | 1,318 | 1,164 | 1,334 | 74.8 | 65.3 |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gabon | 32 | 19 | 21 | 11 | 7 | 10 | 0 | 1.4 | 0 |
| Indonesia | 0 | 0 | 0 | 4 | 25 | 8 | 1 | 0 | Negl. |
| Iran | 248 | 265 | 284 | 380 | 338 | 319 | 288 | 10.8 | 14.1 |
| Nigeria | 168 | 241 | 202 | 181 | 162 | 177 | 227 | 7.3 | 11.1 |
| Venezuela | 42 | 38 | 43 | 28 | 16 | 18 | 31 | 1.8 | 1.5 |
| Total OPEC ³ | 2,182 | 1,942 | 1,686 | 1,822 | 1,844 | 1,671 | 1,855 | 95.0 | 90.8 |
| UK | 0 | 0 | 0 | 14 | 52 | 66 | 51 | 0 | 2.5 |
| Norway | Negl. | 3 | 12 | 23 | 38 | 12 | 27 | 0 | 1.3 |
| Other | 89 | 86 | 89 | 95 | 62 | 81 | 83 | 3.9 | 4.1 |
| Total | 2,297 | 2,050 | 1,807 | 1,979 | 2,018 | 1,855 | 2,042 | 100.0 | 100.0 |

| | | Thousand b/d | | | | | | | | |
|---------------------------------------|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------|--------------|
| Sep 1973 (Pre- Crisis Level) | | 1977 | | | | | | | Percent of Total | |
| | | 1974 | 1975 | 1976 | 1st Qtr | 2d Qtr | Jul | Aug | Sep 1973 | Aug 1977 |
| France | | | | | | | | | | |
| Abu Dhabi | 249 | 268 | 210 | 202 | 186 | 214 | 158 | 147 | 9.0 | 6.2 |
| Algeria | 227 | 181 | 118 | 95 | 99 | 92 | 81 | 107 | 8.2 | 4.5 |
| Egypt | 1 | 0 | 4 | 13 | 11 | 8 | 0 | 0 | Negl. | 0 |
| Iraq | 375 | 330 | 240 | 335 | 379 | 274 | 436 | 447 | 13.6 | 18.9 |
| Kuwait | 316 | 246 | 134 | 86 | 103 | 57 | 84 | 59 | 11.4 | 2.5 |
| Libya | 131 | 74 | 44 | 62 | 38 | 42 | 74 | 46 | 4.7 | 1.9 |
| Qatar | 69 | 70 | 47 | 58 | 84 | 35 | 59 | 60 | 2.5 | 2.5 |
| Saudi Arabia | 623 | 842 | 669 | 870 | 832 | 813 | 834 | 987 | 22.5 | 41.8 |
| Other ² | 12 | 10 | 41 | 60 | 49 | 60 | 60 | 18 | 0.4 | 0.8 |
| Total OAPEC | 2,003 | 2,021 | 1,507 | 1,781 | 1,781 | 1,595 | 1,786 | 1,871 | 72.5 | 79.3 |
| Dubai | 27 | 36 | 43 | 33 | 52 | 31 | 41 | 62 | 1.0 | 2.6 |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gabon | 33 | 43 | 27 | 29 | 53 | 44 | 42 | 36 | 1.2 | 1.5 |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iran | 216 | 174 | 266 | 294 | 336 | 197 | 102 | 85 | 7.8 | 3.6 |
| Nigeria | 253 | 208 | 175 | 150 | 127 | 160 | 168 | 150 | 9.2 | 6.4 |
| Sharjah | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Venezuela | 36 | 28 | 15 | 16 | 10 | 14 | 17 | 31 | 1.3 | 1.3 |
| Total OPEC ³ | 2,555 | 2,500 | 1,988 | 2,230 | 2,299 | 1,973 | 2,096 | 2,217 | 92.4 | 93.9 |
| UK | 0 | 0 | 0 | 7 | 0 | 28 | 37 | 31 | 0 | 1.3 |
| Norway | 0 | 2 | 18 | 46 | 0 | 22 | 17 | 14 | 0 | 0.6 |
| Other | 196 | 92 | 69 | 61 | 113 | 91 | 79 | 80 | 7.1 | 3.4 |
| Total | 2,764 ¹ | 2,604 | 2,120 | 2,417 | 2,472 | 2,182 | 2,289 | 2,360 | 100.0 | 100.0 |

(Continued)

| | Thousand b/d | | | | | | Percent of Total | |
|-----------------------------------|---|--------------|--------------|--------------|--------------|--------------|------------------|----------------|
| | 4th Qtr 1973 (Pre- Crisis Level) | 1974 | 1975 | 1976 | 1977 | | 4th Qtr 1973 | 2d Qtr 1977 |
| | | | | | 1st Qtr | 2d Qtr | | |
| Italy | | | | | | | | |
| Algeria | 61 | 49 | 77 | 51 | 22 | 20 | 2.4 | 0.9 |
| Egypt | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iraq | 383 | 269 | 374 | 312 | 331 | 327 | 15.2 | 15.0 |
| Kuwait | 212 | 130 | 82 | 47 | 167 | 114 | | 5.3 |
| Libya | 597 | 478 | 260 | 340 | 302 | 328 | 23.7 | 15.0 |
| Qatar | 21 | 57 | 26 | 26 | 24 | 20 | 0.8 | 0.9 |
| Saudi Arabia | 692 | 824 | 527 | 545 | 605 | 694 | 27.5 | 31.8 |
| United Arab Emirates ¹ | 0 | 13 | 33 | 50 | 99 | 34 | 0 | 1.6 |
| Other ² | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total OAPEC | 1,966 | 1,820 | 1,379 | 1,371 | 1,550 | 1,537 | 78.2 | 70.5 |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gabon | 3 | 10 | 6 | 1 | 10 | 0 | 0.1 | 0 |
| Indonesia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iran | 277 | 301 | 258 | 292 | 250 | 296 | 11.0 | 13.6 |
| Nigeria | 9 | 63 | 7 | 7 | 10 | 18 | 0.4 | 0.8 |
| Venezuela | 18 | 13 | 20 | 16 | 12 | 34 | 0.7 | 1.6 |
| Total OPEC ³ | 2,273 | 2,207 | 1,670 | 1,687 | 1,832 | 1,885 | 90.4 | 86.5 |
| UK | 0 | 0 | 0 | 13 | 4 | 0 | 0 | 0 |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Other ⁵ | 241 | 190 | 271 | 371 | 348 | 295 | 9.6 | 13.5 |
| Total | 2,514 | 2,397 | 1,941 | 2,071 | 2,184 | 2,180 | 100.0 | 100.0 |

¹ Including oil imports from Abu Dhabi and possibly from Dubai and Sharjah, which are not members of OAPEC.² Including, when applicable, Bahrain and Syria.³ Consisting of OAPEC members (excluding Bahrain, Egypt, and Syria) plus the other countries shown.⁴ Estimated.⁵ Including data that cannot be distributed by area of origin.

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual Average |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|
| United States¹ | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 2,732 | 2,873 | 3,162 | 3,049 | 3,215 | 3,220 | 3,501 | 3,595 | 3,471 | 3,740 | 3,452 | 2,891 | 3,244 |
| Product imports | 3,079 | 3,501 | 3,413 | 2,551 | 2,603 | 2,659 | 2,671 | 2,915 | 2,903 | 2,785 | 3,412 | 3,055 | 3,012 |
| Total imports | 5,811 | 6,374 | 6,575 | 5,600 | 5,818 | 5,879 | 6,172 | 6,506 | 6,374 | 6,525 | 6,864 | 5,946 | 6,256 |
| Exports | 210 | 260 | 224 | 275 | 237 | 215 | 240 | 217 | 242 | 221 | 202 | 227 | 231 |
| Net imports | 5,601 | 6,114 | 6,351 | 5,325 | 5,581 | 5,664 | 5,932 | 6,289 | 6,132 | 6,304 | 6,662 | 5,719 | 6,025 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 2,382 | 2,248 | 2,462 | 3,267 | 3,908 | 3,925 | 4,091 | 3,924 | 3,797 | 3,810 | 3,958 | 3,869 | 3,477 |
| Product imports | 2,973 | 2,973 | 2,753 | 2,703 | 2,580 | 2,493 | 2,397 | 2,434 | 2,225 | 2,320 | 2,704 | 2,853 | 2,611 |
| Total imports | 5,355 | 5,221 | 5,215 | 5,970 | 6,488 | 6,418 | 6,488 | 6,358 | 6,022 | 6,130 | 6,662 | 6,722 | 6,088 |
| Exports | 207 | 203 | 196 | 243 | 247 | 238 | 253 | 247 | 171 | 221 | 186 | 231 | 220 |
| Net imports | 5,148 | 5,018 | 5,019 | 5,727 | 6,241 | 6,180 | 6,235 | 6,111 | 5,851 | 5,909 | 6,476 | 6,491 | 5,868 |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 4,029 | 3,828 | 3,656 | 3,378 | 3,486 | 3,905 | 4,192 | 4,581 | 4,689 | 4,389 | 4,623 | 4,476 | 4,105 |
| Product imports | 2,832 | 2,348 | 2,074 | 1,662 | 1,728 | 1,502 | 1,767 | 1,717 | 2,115 | 1,940 | 1,796 | 1,949 | 1,951 |
| Total imports | 6,861 | 6,176 | 5,730 | 5,040 | 5,214 | 5,407 | 5,959 | 6,298 | 6,804 | 6,329 | 6,419 | 6,425 | 6,056 |
| Exports | 228 | 248 | 213 | 190 | 202 | 224 | 186 | 205 | 205 | 187 | 166 | 262 | 209 |
| Net imports | 6,633 | 5,928 | 5,517 | 4,850 | 5,012 | 5,183 | 5,773 | 6,093 | 6,599 | 6,142 | 6,253 | 6,163 | 5,847 |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 4,594 | 4,208 | 4,738 | 4,790 | 4,669 | 5,621 | 5,792 | 5,556 | 5,875 | 5,699 | 5,955 | 5,925 | 5,287 |
| Product imports | 2,016 | 2,423 | 1,946 | 1,805 | 1,654 | 1,858 | 2,099 | 1,826 | 2,038 | 1,808 | 2,115 | 2,353 | 2,008 |
| Total imports | 6,610 | 6,631 | 6,684 | 6,595 | 6,323 | 7,479 | 7,891 | 7,382 | 7,913 | 7,507 | 8,070 | 8,278 | 7,295 |
| Exports | 156 | 241 | 185 | 222 | 180 | 213 | 242 | 220 | 196 | 198 | 348 | 309 | 226 |
| Net imports | 6,454 | 6,390 | 6,499 | 6,373 | 6,143 | 7,266 | 7,649 | 7,162 | 7,717 | 7,309 | 7,720 | 7,969 | 7,069 |
| 1977 | | | | | | | | | | | | | |
| Crude imports | 6,288 | 6,652 | 6,633 | 6,785 | 6,821 | 6,947 | 6,656 | 6,572 | 6,580 | | | | |
| Product imports | 2,594 | 3,278 | 2,529 | 1,886 | 1,754 | 1,855 | 1,800 | 2,010 | 2,170 | | | | |
| Total imports | 8,882 | 9,930 | 9,162 | 8,671 | 8,575 | 8,802 | 8,456 | 8,582 | 8,750 | | | | |
| Exports | 192 | 234 | 207 | 223 | 288 | 256 | 212 | 228 | 214 | | | | |
| Net imports | 8,690 | 9,696 | 8,955 | 8,448 | 8,287 | 8,546 | 8,244 | 8,354 | 8,536 | | | | |
| Canada | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 945 | 975 | 932 | 772 | 930 | 741 | 1,058 | 937 | 940 | 799 | 934 | 802 | 897 |
| Product imports | 163 | 93 | 55 | 37 | 119 | 121 | 122 | 155 | 105 | 132 | 140 | 149 | 130 |
| Total imports | 1,108 | 1,068 | 987 | 809 | 1,049 | 862 | 1,180 | 1,090 | 1,045 | 931 | 1,074 | 951 | 1,027 |
| Exports | 1,357 | 1,500 | 1,364 | 1,472 | 1,495 | 1,446 | 1,162 | 1,298 | 1,300 | 1,363 | 1,357 | 1,237 | 1,364 |
| Net imports | -249 | -432 | -377 | -663 | -446 | -584 | 18 | -208 | -255 | -432 | -283 | -322 | -337 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 822 | 988 | 717 | 718 | 971 | 763 | 816 | 817 | 672 | 787 | 798 | 721 | 820 |
| Product imports | 96 | 44 | 142 | 33 | 114 | 125 | 89 | 104 | 58 | 75 | 87 | 74 | 83 |
| Total imports | 918 | 1,032 | 859 | 751 | 1,085 | 888 | 905 | 921 | 730 | 862 | 885 | 795 | 903 |
| Exports | 1,180 | 1,402 | 1,056 | 1,266 | 1,270 | 1,220 | 956 | 978 | 1,026 | 988 | 1,110 | 981 | 1,086 |
| Net imports | -262 | -370 | -197 | -515 | -185 | -332 | -51 | -57 | -296 | -126 | -225 | -186 | -183 |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 1,052 | 915 | 849 | 804 | 1,067 | 850 | 678 | 946 | 716 | 516 | 562 | 929 | 824 |
| Product imports | 48 | 68 | 27 | 46 | 56 | 56 | 48 | 50 | 40 | 57 | 26 | 27 | 41 |
| Total imports | 1,100 | 983 | 876 | 850 | 1,123 | 906 | 726 | 996 | 756 | 573 | 588 | 956 | 865 |
| Exports | 1,122 | 1,068 | 834 | 815 | 745 | 702 | 893 | 905 | 936 | 921 | 1,017 | 848 | 899 |
| Net imports | -22 | -85 | 42 | 35 | 378 | 204 | -167 | 91 | -180 | -348 | -429 | 108 | -34 |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 738 | 783 | 870 | 802 | 793 | 832 | 825 | 728 | 409 | 565 | 690 | 596 | 720 |
| Product imports | 21 | 26 | 30 | 16 | 45 | 45 | 43 | 54 | 23 | 60 | 50 | 20 | 36 |
| Total imports | 759 | 809 | 900 | 818 | 838 | 877 | 868 | 782 | 432 | 625 | 740 | 616 | 756 |
| Exports | 1,029 | 669 | 569 | 636 | 650 | 676 | 815 | 571 | 603 | 605 | 625 | 612 | 646 |
| Net imports | -270 | 140 | 331 | 182 | 188 | 201 | 53 | 211 | -171 | 20 | 115 | 4 | 110 |
| 1977 | | | | | | | | | | | | | |
| Crude imports | 729 | 645 | 752 | 585 | 679 | 802 | 614 | | | | | | |
| Product imports | 28 | 25 | 27 | 19 | 49 | 60 | 37 | | | | | | |
| Total imports | 757 | 670 | 779 | 604 | 728 | 862 | 651 | | | | | | |
| Exports | 611 | 568 | 522 | 526 | 515 | 506 | 523 | | | | | | |
| Net imports | 146 | 102 | 257 | 78 | 213 | 356 | 128 | | | | | | |
| Japan | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 4,662 | 4,775 | 4,830 | 4,864 | 4,918 | 5,043 | 4,697 | 5,550 | 4,878 | 5,483 | 5,029 | 5,139 | 4,992 |
| Product imports | 640 | 803 | 650 | 542 | 664 | 640 | 523 | 507 | 443 | 592 | 533 | 486 | 584 |
| Total imports | 5,302 | 5,578 | 5,480 | 5,406 | 5,582 | 5,683 | 5,220 | 6,057 | 5,321 | 6,075 | 5,562 | 5,625 | 5,576 |
| Exports | 11 | 33 | 23 | 28 | 19 | 13 | 39 | 31 | 21 | 25 | 13 | 25 | 24 |
| Net imports | 5,291 | 5,545 | 5,457 | 5,378 | 5,563 | 5,670 | 5,181 | 6,026 | 5,300 | 6,050 | 5,549 | 5,600 | 5,552 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 4,467 | 5,008 | 4,886 | 5,120 | 4,794 | 4,878 | 5,204 | 4,601 | 4,214 | 4,763 | 4,818 | 4,834 | 4,798 |
| Product imports | 648 | 671 | 684 | 625 | 858 | 823 | 755 | 624 | 531 | 529 | 569 | 597 | 662 |
| Total imports | 5,115 | 5,679 | 5,570 | 5,745 | 5,652 | 5,701 | 5,959 | 5,225 | 4,745 | 5,292 | 5,387 | 5,431 | 5,460 |
| Exports | 14 | 25 | 16 | 20 | 24 | 17 | 25 | 95 | 135 | 46 | 79 | 179 | 56 |
| Net imports | 5,101 | 5,654 | 5,554 | 5,725 | 5,628 | 5,684 | 5,934 | 5,132 | 4,610 | 5,246 | 5,308 | 5,252 | 5,404 |

Thousand b/d

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual Average |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|
| Japan (Continued) | | | | | | | | | | | | | |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 4,581 | 4,502 | 4,773 | 4,304 | 4,765 | 3,956 | 4,401 | 4,120 | 4,637 | 4,928 | 4,611 | 4,880 | 4,539 |
| Product imports | 471 | 367 | 466 | 445 | 439 | 361 | 487 | 489 | 461 | 518 | 545 | 574 | 469 |
| Total imports | 5,052 | 4,869 | 5,239 | 4,749 | 5,204 | 4,317 | 4,888 | 4,609 | 5,098 | 5,446 | 5,156 | 5,454 | 5,008 |
| Exports | 80 | 52 | 40 | 38 | 61 | 40 | 42 | 17 | 5 | 7 | 5 | 6 | 32 |
| Net imports | 4,972 | 4,817 | 5,199 | 4,711 | 5,143 | 4,277 | 4,846 | 4,592 | 5,093 | 5,439 | 5,151 | 5,448 | 4,976 |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 3,901 | 4,683 | 4,586 | 4,989 | 4,217 | 4,469 | 4,690 | 4,391 | 4,492 | 4,642 | 5,165 | 5,019 | 4,601 |
| Product imports | 699 | 649 | 704 | 563 | 593 | 637 | 669 | 651 | 747 | 504 | 615 | 634 | 634 |
| Total imports | 4,600 | 5,332 | 5,290 | 5,552 | 4,810 | 5,106 | 5,359 | 5,042 | 5,239 | 5,146 | 5,780 | 5,653 | 5,235 |
| Exports | 3 | 5 | 9 | 4 | 4 | 5 | 5 | 6 | 9 | 4 | 9 | 6 | 6 |
| Net imports | 4,597 | 5,327 | 5,281 | 5,548 | 4,806 | 5,101 | 5,354 | 5,036 | 5,230 | 5,142 | 5,771 | 5,647 | 5,229 |
| 1977 | | | | | | | | | | | | | |
| Crude imports | 5,023 | 4,857 | 5,671 | 4,210 | 4,955 | 4,234 | 4,398 | 4,940 | 4,450 | | | | |
| Product imports | 584 | 686 | 665 | 632 | 682 | 729 | 561 | 644 | 705 | | | | |
| Total imports | 5,607 | 5,543 | 6,336 | 4,842 | 5,637 | 4,963 | 4,959 | 5,584 | 5,155 | | | | |
| Exports | 7 | 8 | 8 | 6 | 4 | 11 | 8 | 5 | 7 | | | | |
| Net imports | 5,600 | 5,535 | 6,328 | 4,836 | 5,633 | 4,952 | 4,951 | 5,579 | 5,148 | | | | |
| France | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 2,897 | 2,699 | 2,955 | 2,728 | 2,540 | 2,676 | 2,288 | 2,791 | 2,764 | 2,797 | 3,053 | 2,549 | 2,728 |
| Product imports | 137 | 174 | 148 | 142 | 176 | 128 | 138 | 169 | 139 | 171 | 126 | 117 | 147 |
| Total imports | 3,034 | 2,873 | 3,103 | 2,870 | 2,716 | 2,804 | 2,426 | 2,960 | 2,903 | 2,968 | 3,179 | 2,666 | 2,875 |
| Exports | 255 | 260 | 232 | 226 | 317 | 290 | 246 | 307 | 307 | 261 | 253 | 279 | 269 |
| Net imports | 2,779 | 2,613 | 2,871 | 2,644 | 2,399 | 2,514 | 2,180 | 2,653 | 2,596 | 2,707 | 2,926 | 2,387 | 2,606 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 2,686 | 2,942 | 2,508 | 2,990 | 2,476 | 2,555 | 2,580 | 2,529 | 2,274 | 2,725 | 2,322 | 2,686 | 2,604 |
| Product imports | 80 | 121 | 80 | 121 | 144 | 98 | 180 | 152 | 188 | 157 | 134 | 200 | 138 |
| Total imports | 2,766 | 3,063 | 2,588 | 3,111 | 2,620 | 2,653 | 2,760 | 2,681 | 2,462 | 2,882 | 2,456 | 2,886 | 2,742 |
| Exports | 269 | 230 | 258 | 277 | 257 | 225 | 210 | 211 | 186 | 166 | 220 | 211 | 224 |
| Net imports | 2,497 | 2,833 | 2,330 | 2,834 | 2,363 | 2,428 | 2,550 | 2,470 | 2,276 | 2,716 | 2,236 | 2,675 | 2,518 |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 2,234 | 2,056 | 2,095 | 2,047 | 1,952 | 1,989 | 2,130 | 2,201 | 2,136 | 2,199 | 2,203 | 2,462 | 2,120 |
| Product imports | 213 | 266 | 203 | 165 | 127 | 162 | 180 | 100 | 118 | 113 | 131 | 131 | 158 |
| Total imports | 2,447 | 2,322 | 2,298 | 2,212 | 2,079 | 2,151 | 2,310 | 2,301 | 2,254 | 2,312 | 2,334 | 2,593 | 2,278 |
| Exports | 209 | 221 | 175 | 217 | 190 | 230 | 182 | 302 | 264 | 214 | 267 | 259 | 227 |
| Net imports | 2,238 | 2,101 | 2,123 | 1,995 | 1,889 | 1,921 | 2,128 | 1,999 | 1,990 | 2,098 | 2,067 | 2,334 | 2,051 |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 2,175 | 2,447 | 2,600 | 2,500 | 2,188 | 2,039 | 2,456 | 2,370 | 2,517 | 2,180 | 2,767 | 2,704 | 2,417 |
| Product imports | 134 | 143 | 158 | 158 | 128 | 233 | 266 | 218 | 199 | 223 | 170 | 151 | 181 |
| Total imports | 2,309 | 2,590 | 2,758 | 2,658 | 2,316 | 2,272 | 2,722 | 2,588 | 2,716 | 2,403 | 2,937 | 2,855 | 2,598 |
| Exports | 276 | 325 | 395 | 316 | 272 | 324 | 244 | 288 | 274 | 207 | 268 | 288 | 249 |
| Net imports | 2,033 | 2,265 | 2,363 | 2,342 | 2,044 | 1,948 | 2,478 | 2,300 | 2,442 | 2,196 | 2,669 | 2,567 | 2,349 |
| 1977 | | | | | | | | | | | | | |
| Crude imports | 2,711 | 2,508 | 2,198 | 2,537 | 1,944 | 2,079 | 2,289 | 2,360 | | | | | |
| Product imports | 123 | 117 | 169 | 166 | 145 | 183 | 171 | 216 | | | | | |
| Total imports | 2,834 | 2,625 | 2,367 | 2,703 | 2,089 | 2,262 | 2,460 | 2,576 | | | | | |
| Exports | 277 | 266 | 286 | 356 | 366 | 276 | 278 | 351 | | | | | |
| Net imports | 2,557 | 2,359 | 2,081 | 2,347 | 1,723 | 1,986 | 2,182 | 2,225 | | | | | |
| Italy | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 2,308 | 2,448 | 2,600 | 2,598 | 2,498 | 2,996 | 2,779 | 2,784 | 2,606 | 2,548 | 1,844 | N.A. | 2,567 |
| Product imports | 76 | 133 | 97 | 98 | 154 | 98 | 109 | 137 | 232 | 29 | 65 | N.A. | 102 |
| Total imports | 2,384 | 2,581 | 2,697 | 2,696 | 2,652 | 3,094 | 2,888 | 2,921 | 2,838 | 2,577 | 1,909 | N.A. | 2,669 |
| Exports | 604 | 628 | 513 | 595 | 678 | 671 | 775 | 725 | 586 | 630 | 515 | N.A. | 579 |
| Net imports | 1,780 | 1,953 | 2,184 | 2,101 | 1,974 | 2,423 | 2,113 | 2,196 | 2,252 | 1,947 | 1,394 | N.A. | 2,090 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 1,576 | 2,850 | 2,270 | 2,527 | 2,961 | 2,435 | 2,575 | 2,800 | 2,254 | 2,270 | 2,285 | 2,237 | 2,397 |
| Product imports | 71 | 60 | 92 | 145 | 126 | 108 | 219 | 190 | 241 | 225 | 378 | 283 | 119 |
| Total imports | 1,647 | 2,910 | 2,362 | 2,672 | 3,087 | 2,543 | 2,794 | 2,990 | 2,495 | 2,495 | 2,663 | 2,520 | 2,516 |
| Exports | 198 | 645 | 413 | 583 | 444 | 397 | 546 | 433 | 407 | 293 | 375 | 363 | 423 |
| Net imports | 1,449 | 2,265 | 1,949 | 2,089 | 2,643 | 2,146 | 2,248 | 2,557 | 2,088 | 2,202 | 2,288 | 2,157 | 2,093 |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 1,858 | 1,688 | 1,724 | 1,841 | 1,659 | 1,949 | 1,706 | 1,918 | 2,236 | 2,117 | 1,752 | 1,990 | 1,941 |
| Product imports | 172 | 229 | 246 | 246 | 319 | 181 | 219 | 142 | 138 | 202 | 191 | 229 | 180 |
| Total imports | 2,030 | 1,917 | 1,970 | 2,087 | 1,978 | 2,130 | 1,925 | 2,060 | 2,374 | 2,319 | 1,943 | 2,219 | 2,121 |
| Exports | 240 | 264 | 212 | 240 | 246 | 308 | 285 | 413 | 394 | 324 | 252 | 236 | 291 |
| Net imports | 1,790 | 1,653 | 1,758 | 1,847 | 1,732 | 1,822 | 1,640 | 1,647 | 1,980 | 1,995 | 1,691 | 1,983 | 1,830 |

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual Average |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------|
| Italy (Continued) | | | | | | | | | | | | | |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 2,024 | 2,024 | 2,024 | 2,014 | 2,014 | 2,014 | 2,115 | 2,115 | 2,115 | 2,131 | 2,131 | 2,131 | 2,071 |
| Product imports | 160 | 160 | 160 | 216 | 216 | 216 | 219 | 219 | 219 | 194 | 194 | 194 | 197 |
| Total imports | 2,184 | 2,184 | 2,184 | 2,230 | 2,230 | 2,230 | 2,334 | 2,334 | 2,334 | 2,325 | 2,325 | 2,325 | 2,268 |
| Exports | 271 | 271 | 271 | 337 | 337 | 337 | 322 | 322 | 322 | 289 | 289 | 289 | 305 |
| Net imports | 1,913 | 1,913 | 1,913 | 1,893 | 1,893 | 1,893 | 2,012 | 2,012 | 2,012 | 2,036 | 2,036 | 2,036 | 1,963 |
| 1977 ² | | | | | | | | | | | | | |
| Crude imports | 2,198 | 2,198 | 2,198 | 2,370 | 1,931 | 2,145 | 1,966 | 2,025 | 1,971 | | | | |
| Product imports | 232 | 232 | 232 | 198 | 141 | 196 | 145 | 134 | 161 | | | | |
| Total imports | 2,430 | 2,430 | 2,430 | 2,568 | 2,072 | 2,341 | 2,111 | 2,159 | 2,132 | | | | |
| Exports | 368 | 368 | 368 | 341 | 365 | 434 | 290 | 358 | 292 | | | | |
| Net imports | 2,062 | 2,062 | 2,062 | 2,227 | 1,707 | 1,907 | 1,821 | 1,801 | 1,840 | | | | |
| United Kingdom | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 2,276 | 2,090 | 2,273 | 2,248 | 2,402 | 2,535 | 2,175 | 2,818 | 1,917 | 2,892 | 2,415 | 2,004 | 2,329 |
| Product imports | 615 | 533 | 457 | 359 | 488 | 439 | 323 | 417 | 361 | 416 | 326 | 208 | 409 |
| Total imports | 2,891 | 2,623 | 2,730 | 2,607 | 2,890 | 2,974 | 2,498 | 3,235 | 2,278 | 3,308 | 2,741 | 2,212 | 2,738 |
| Exports | 464 | 311 | 323 | 329 | 332 | 257 | 430 | 555 | 496 | 464 | 488 | 293 | 396 |
| Net imports | 2,427 | 2,312 | 2,407 | 2,278 | 2,558 | 2,717 | 2,068 | 2,680 | 1,782 | 2,844 | 2,253 | 1,919 | 2,342 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 2,593 | 2,439 | 2,486 | 2,437 | 2,486 | 2,442 | 2,182 | 1,994 | 2,144 | 2,534 | 2,259 | 1,941 | 2,271 |
| Product imports | 440 | 372 | 353 | 306 | 364 | 291 | 326 | 252 | 246 | 324 | 372 | 385 | 314 |
| Total imports | 3,033 | 2,811 | 2,839 | 2,743 | 2,850 | 2,733 | 2,508 | 2,246 | 2,390 | 2,858 | 2,631 | 2,326 | 2,585 |
| Exports | 491 | 256 | 204 | 238 | 344 | 373 | 331 | 364 | 353 | 385 | 268 | 314 | 321 |
| Net imports | 2,542 | 2,555 | 2,635 | 2,505 | 2,506 | 2,360 | 2,177 | 1,882 | 2,037 | 2,473 | 2,363 | 2,012 | 2,264 |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 2,216 | 2,030 | 1,491 | 1,849 | 1,802 | 1,926 | 1,748 | 1,776 | 1,687 | 2,032 | 1,429 | 1,599 | 1,775 |
| Product imports | 442 | 329 | 267 | 290 | 231 | 257 | 262 | 247 | 240 | 303 | 348 | 344 | 292 |
| Total imports | 2,658 | 2,359 | 1,758 | 2,139 | 2,033 | 2,183 | 2,010 | 2,023 | 1,927 | 2,335 | 1,777 | 1,943 | 2,067 |
| Exports | 310 | 343 | 224 | 226 | 262 | 303 | 317 | 308 | 357 | 423 | 299 | 261 | 300 |
| Net imports | 2,348 | 2,016 | 1,534 | 1,913 | 1,771 | 1,880 | 1,693 | 1,715 | 1,570 | 1,912 | 1,478 | 1,683 | 1,767 |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 1,888 | 1,986 | 1,762 | 1,938 | 1,698 | 1,814 | 1,688 | 1,615 | 1,779 | 1,474 | 2,112 | 1,724 | 1,770 |
| Product imports | 302 | 314 | 421 | 301 | 318 | 267 | 297 | 220 | 221 | 200 | 251 | 283 | 282 |
| Total imports | 2,190 | 2,300 | 2,183 | 2,239 | 2,016 | 2,081 | 1,985 | 1,835 | 2,000 | 1,674 | 2,363 | 2,007 | 2,052 |
| Exports | 333 | 264 | 384 | 332 | 349 | 328 | 407 | 399 | 488 | 464 | 522 | 447 | 392 |
| Net imports | 1,857 | 2,036 | 1,799 | 1,907 | 1,667 | 1,753 | 1,578 | 1,436 | 1,512 | 1,210 | 1,841 | 1,560 | 1,660 |
| 1977 | | | | | | | | | | | | | |
| Crude imports | 1,756 | 1,511 | 1,672 | 1,347 | 1,701 | 1,449 | 1,147 | 1,263 | | | | | |
| Product imports | 253 | 238 | 261 | 272 | 312 | 286 | 261 | 313 | | | | | |
| Total imports | 2,109 | 1,749 | 1,933 | 1,619 | 2,013 | 1,735 | 1,408 | 1,576 | | | | | |
| Exports | 546 | 575 | 589 | 538 | 539 | 732 | 597 | 747 | | | | | |
| Net imports | 1,563 | 1,174 | 1,344 | 1,081 | 1,474 | 1,003 | 811 | 829 | | | | | |
| West Germany | | | | | | | | | | | | | |
| 1973 | | | | | | | | | | | | | |
| Crude imports | 2,177 | 2,217 | 2,226 | 2,201 | 2,173 | 2,306 | 2,091 | 2,140 | 2,297 | 2,359 | 2,274 | 2,067 | 2,210 |
| Product imports | 776 | 788 | 690 | 831 | 870 | 748 | 789 | 710 | 828 | 904 | 859 | 709 | 836 |
| Total imports | 2,953 | 3,005 | 2,916 | 3,032 | 3,043 | 3,054 | 2,889 | 2,850 | 3,125 | 3,263 | 3,133 | 2,776 | 3,046 |
| Exports | 153 | 177 | 164 | 135 | 184 | 174 | 177 | 185 | 155 | 239 | 235 | 141 | 177 |
| Net imports | 2,800 | 2,828 | 2,752 | 2,897 | 2,859 | 2,880 | 2,712 | 2,665 | 2,970 | 3,024 | 2,898 | 2,635 | 2,869 |
| 1974 | | | | | | | | | | | | | |
| Crude imports | 2,050 | 1,891 | 1,973 | 1,962 | 1,990 | 2,245 | 2,080 | 2,147 | 2,055 | 2,048 | 2,244 | 1,918 | 2,050 |
| Product imports | 613 | 774 | 767 | 646 | 795 | 740 | 882 | 891 | 806 | 756 | 669 | 689 | 746 |
| Total imports | 2,663 | 2,665 | 2,649 | 2,608 | 2,785 | 2,985 | 2,962 | 3,038 | 2,861 | 2,804 | 2,913 | 2,607 | 2,796 |
| Exports | 180 | 178 | 238 | 147 | 236 | 141 | 170 | 214 | 193 | 165 | 184 | 186 | 199 |
| Net imports | 2,483 | 2,487 | 2,411 | 2,461 | 2,549 | 2,844 | 2,792 | 2,824 | 2,668 | 2,639 | 2,729 | 2,421 | 2,597 |
| 1975 | | | | | | | | | | | | | |
| Crude imports | 1,684 | 1,614 | 1,453 | 1,798 | 1,754 | 1,911 | 1,676 | 1,839 | 1,810 | 2,051 | 2,075 | 1,935 | 1,807 |
| Product imports | 583 | 766 | 606 | 824 | 575 | 920 | 794 | 767 | 873 | 789 | 667 | 718 | 709 |
| Total imports | 2,267 | 2,380 | 2,059 | 2,622 | 2,329 | 2,831 | 2,470 | 2,606 | 2,683 | 2,840 | 2,742 | 2,653 | 2,509 |
| Exports | 158 | 120 | 113 | 132 | 100 | 121 | 137 | 120 | 133 | 125 | 161 | 126 | 129 |
| Net imports | 2,109 | 2,260 | 1,946 | 2,490 | 2,229 | 2,710 | 2,333 | 2,486 | 2,550 | 2,715 | 2,581 | 2,527 | 2,380 |
| 1976 | | | | | | | | | | | | | |
| Crude imports | 1,669 | 1,836 | 1,717 | 1,823 | 1,830 | 1,847 | 2,050 | 2,168 | 2,220 | 2,068 | 2,233 | 2,273 | 1,979 |
| Product imports | 761 | 978 | 792 | 808 | 833 | 871 | 850 | 891 | 811 | 645 | 690 | 899 | 830 |
| Total imports | 2,430 | 2,814 | 2,509 | 2,631 | 2,663 | 2,718 | 2,900 | 3,159 | 3,031 | 2,713 | 2,923 | 3,172 | 2,809 |
| Exports | 113 | 115 | 148 | 115 | 131 | 101 | 176 | 128 | 168 | 116 | 132 | 160 | 134 |
| Net imports | 2,317 | 2,699 | 2,361 | 2,516 | 2,532 | 2,617 | 2,724 | 3,031 | 2,863 | 2,597 | 2,791 | 3,012 | 2,675 |
| 1977 | | | | | | | | | | | | | |
| Crude imports | 2,140 | 2,020 | 1,894 | 1,774 | 1,871 | 1,920 | 2,042 | 2,097 | | | | | |
| Product imports | 705 | 615 | 680 | 813 | 751 | 921 | 969 | 835 | | | | | |
| Total imports | 2,845 | 2,635 | 2,574 | 2,587 | 2,622 | 2,841 | 3,011 | 2,932 | | | | | |
| Exports | 78 | 155 | 128 | 113 | 152 | 147 | 117 | 129 | | | | | |
| Net imports | 2,767 | 2,480 | 2,446 | 2,474 | 2,470 | 2,694 | 2,894 | 2,803 | | | | | |

¹ Bureau of the Mines data through Apr 1977.² Estimated.

Developed Countries: Exports to OPEC¹

Million US \$ (f.o.b.)

| | Algeria | Ecua- dor | Gabon | Indo- nesia | Iran | Iraq | Kuwait | Libya | Nigeria | Qatar | Saudi Arabia | UAE | Vene- zuela | Total |
|-----------------------|---------|--------------|-------|----------------|---------|---------|--------|-------|---------|-------|-----------------|-------|----------------|----------|
| United States | | | | | | | | | | | | | | |
| 1974 | 315.1 | 325.8 | 32.5 | 530.5 | 1,733.6 | 284.7 | 208.5 | 139.4 | 286.4 | 33.6 | 835.1 | 229.7 | 1,767.7 | 6,722.6 |
| 1975 | 631.8 | 409.8 | 58.7 | 810.1 | 3,243.7 | 309.7 | 366.1 | 231.5 | 536.3 | 50.3 | 1,501.8 | 372.2 | 2,243.3 | 10,765.3 |
| 1976 | 487.0 | 415.8 | 45.9 | 1,036.0 | 2,776.0 | 381.8 | 471.5 | 276.6 | 769.9 | 78.7 | 2,774.1 | 424.8 | 2,627.8 | 12,565.9 |
| 1st Qtr | 75.7 | 91.3 | 9.1 | 271.1 | 748.3 | 78.6 | 111.9 | 33.1 | 127.4 | 16.5 | 484.9 | 111.2 | 591.7 | 2,750.8 |
| 2d Qtr | 165.5 | 99.8 | 9.0 | 286.7 | 617.1 | 95.4 | 110.3 | 52.5 | 161.6 | 19.6 | 743.3 | 112.0 | 640.1 | 3,112.9 |
| 3d Qtr | 113.0 | 105.1 | 8.0 | 244.5 | 624.5 | 159.0 | 114.6 | 118.1 | 197.8 | 8.5 | 714.2 | 81.0 | 617.4 | 3,105.7 |
| 4th Qtr | 132.8 | 119.6 | 19.8 | 233.7 | 786.1 | 48.8 | 134.7 | 72.9 | 283.1 | 34.1 | 831.7 | 120.6 | 778.6 | 3,596.5 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 116.0 | 98.0 | 9.3 | 187.8 | 592.7 | 53.7 | 152.3 | 68.5 | 203.6 | 24.6 | 739.5 | 147.0 | 669.2 | 3,062.2 |
| 2d Qtr | 145.7 | 133.4 | 9.5 | 197.1 | 609.8 | 49.5 | 157.1 | 89.0 | 239.6 | 19.0 | 838.1 | 134.3 | 766.8 | 3,388.9 |
| Japan | | | | | | | | | | | | | | |
| 1974 | 154.5 | 113.8 | 7.4 | 1,453.3 | 1,014.9 | 474.4 | 279.5 | 234.4 | 285.1 | 46.7 | 677.5 | 309.2 | 399.0 | 5,449.7 |
| 1975 | 260.9 | 177.8 | 14.2 | 1,849.9 | 1,855.3 | 818.8 | 367.1 | 240.2 | 586.0 | 122.3 | 1,350.4 | 420.2 | 360.2 | 8,423.3 |
| 1976 | 204.4 | 133.6 | 16.7 | 1,642.4 | 1,709.4 | 626.2 | 720.4 | 327.2 | 575.0 | 229.0 | 1,892.7 | 636.8 | 563.6 | 9,277.4 |
| 1st Qtr | 44.3 | 21.6 | 1.8 | 361.6 | 400.0 | 128.0 | 126.2 | 68.1 | 112.6 | 56.5 | 330.8 | 130.8 | 89.4 | 1,871.7 |
| 2d Qtr | 56.6 | 32.8 | 2.7 | 381.1 | 400.0 | 191.4 | 172.9 | 75.0 | 124.8 | 42.2 | 529.6 | 143.4 | 118.6 | 2,271.1 |
| 3d Qtr | 33.5 | 34.8 | 7.3 | 435.8 | 437.4 | 156.4 | 199.1 | 93.7 | 133.2 | 60.6 | 569.8 | 165.1 | 149.1 | 2,475.8 |
| 4th Qtr | 70.0 | 44.4 | 4.9 | 463.9 | 472.0 | 150.4 | 222.2 | 90.4 | 204.4 | 69.7 | 462.5 | 197.5 | 206.5 | 2,658.8 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 52.0 | 38.2 | 5.9 | 390.6 | 427.2 | 131.3 | 237.5 | 67.9 | 211.1 | 73.2 | 425.8 | 224.5 | 173.8 | 2,459.0 |
| Apr | 48.4 | 20.8 | 1.3 | 124.4 | 141.8 | 92.9 | 84.6 | 16.6 | 69.1 | 34.8 | 174.1 | 77.8 | 79.9 | 966.5 |
| West Germany | | | | | | | | | | | | | | |
| 1974 | 482.9 | 82.3 | 28.3 | 324.3 | 1,139.1 | 373.4 | 159.9 | 402.4 | 346.0 | 20.9 | 286.0 | 90.2 | 330.6 | 4,066.3 |
| 1975 | 610.1 | 76.5 | 23.9 | 392.7 | 2,105.1 | 1,047.7 | 203.2 | 535.9 | 653.4 | 47.0 | 564.6 | 145.1 | 371.2 | 6,776.4 |
| 1976 | 740.2 | 93.2 | 27.1 | 478.4 | 2,294.3 | 884.4 | 304.8 | 523.3 | 867.2 | 67.7 | 1,191.1 | 233.3 | 540.5 | 8,245.5 |
| 1st Qtr | 178.1 | 17.5 | 5.2 | 97.6 | 484.5 | 216.6 | 56.0 | 121.4 | 185.5 | 15.0 | 182.8 | 45.9 | 104.2 | 1,710.3 |
| 2d Qtr | 152.5 | 17.9 | 6.8 | 104.2 | 539.7 | 182.9 | 63.7 | 102.0 | 176.6 | 22.3 | 302.3 | 50.0 | 117.3 | 1,838.2 |
| 3d Qtr | 198.0 | 34.1 | 7.5 | 123.7 | 590.1 | 269.2 | 83.0 | 153.6 | 214.2 | 11.3 | 324.1 | 58.3 | 167.7 | 2,234.8 |
| 4th Qtr | 211.6 | 23.7 | 7.6 | 152.9 | 680.0 | 215.7 | 102.1 | 146.3 | 290.9 | 19.1 | 381.9 | 79.1 | 151.3 | 2,462.2 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 312.8 | 35.2 | 8.4 | 98.4 | 608.4 | 205.1 | 79.6 | 136.6 | 260.4 | 24.5 | 298.1 | 81.3 | 158.4 | 2,307.2 |
| Apr | 69.8 | 7.4 | 2.7 | 28.9 | 221.1 | 81.7 | 28.2 | 49.0 | 104.6 | 6.0 | 107.4 | 34.9 | 57.6 | 799.3 |
| France | | | | | | | | | | | | | | |
| 1974 | 1,297.5 | 18.4 | 185.0 | 103.9 | 257.5 | 214.4 | 63.9 | 362.7 | 175.0 | 9.4 | 120.0 | 68.6 | 140.9 | 3,017.2 |
| 1975 | 1,904.2 | 18.2 | 335.8 | 120.6 | 631.6 | 409.0 | 97.5 | 405.5 | 462.9 | 15.0 | 198.6 | 134.1 | 175.8 | 4,908.8 |
| 1976 | 1,475.2 | 17.7 | 389.8 | 219.3 | 652.7 | 473.5 | 225.9 | 348.7 | 531.8 | 31.7 | 339.3 | 190.8 | 170.4 | 5,066.8 |
| 1st Qtr | 392.7 | 4.3 | 84.4 | 63.2 | 176.3 | 134.8 | 34.7 | 94.2 | 102.7 | 7.3 | 65.3 | 44.1 | 36.3 | 1,240.3 |
| 2d Qtr | 330.2 | 4.8 | 90.6 | 56.3 | 162.8 | 110.4 | 53.8 | 99.2 | 133.7 | 7.2 | 92.0 | 41.1 | 39.0 | 1,221.1 |
| 3d Qtr | 383.1 | 5.2 | 114.2 | 49.5 | 173.8 | 111.3 | 48.1 | 73.0 | 136.6 | 6.6 | 78.7 | 50.2 | 49.4 | 1,279.7 |
| 4th Qtr | 369.2 | 3.4 | 100.6 | 50.3 | 139.8 | 117.0 | 89.3 | 82.3 | 158.8 | 10.6 | 103.3 | 55.4 | 45.7 | 1,325.7 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 363.7 | 5.5 | 121.0 | 56.2 | 154.3 | 127.7 | 36.4 | 98.6 | 184.8 | 20.7 | 114.3 | 52.2 | 56.2 | 1,391.6 |
| Apr | 104.3 | 1.5 | 45.6 | 19.7 | 57.0 | 32.2 | 18.0 | 33.3 | 55.0 | 4.1 | 59.4 | 13.6 | 16.0 | 459.7 |
| United Kingdom | | | | | | | | | | | | | | |
| 1974 | 128.1 | 31.8 | 8.4 | 109.2 | 653.2 | 139.9 | 139.9 | 146.5 | 520.3 | 51.6 | 280.4 | 227.0 | 117.8 | 2,554.1 |
| 1975 | 173.7 | 38.4 | 6.3 | 133.4 | 1,097.7 | 302.2 | 217.5 | 236.8 | 1,125.9 | 121.6 | 440.0 | 440.8 | 200.3 | 4,534.6 |
| 1976 | 183.7 | 41.2 | 7.3 | 144.4 | 921.1 | 273.5 | 257.1 | 241.8 | 1,389.0 | 155.9 | 710.6 | 579.0 | 229.9 | 5,134.5 |
| 1st Qtr | 50.0 | 7.0 | 2.1 | 33.4 | 235.3 | 95.5 | 52.0 | 57.1 | 339.8 | 38.3 | 131.7 | 141.1 | 55.1 | 1,238.4 |
| 2d Qtr | 47.0 | 9.1 | 1.9 | 38.7 | 250.9 | 60.8 | 59.8 | 61.0 | 338.4 | 44.3 | 161.0 | 137.4 | 48.9 | 1,259.2 |
| 3d Qtr | 43.9 | 11.4 | 1.5 | 32.2 | 226.2 | 63.4 | 69.8 | 64.7 | 340.5 | 34.0 | 193.8 | 130.3 | 50.8 | 1,262.5 |
| 4th Qtr | 42.8 | 13.7 | 1.8 | 40.1 | 208.7 | 53.8 | 75.5 | 59.0 | 370.3 | 39.3 | 224.1 | 170.2 | 75.1 | 1,374.4 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 43.8 | 22.3 | 2.0 | 42.7 | 274.3 | 66.4 | 79.1 | 61.9 | 407.2 | 42.6 | 209.7 | 209.1 | 59.8 | 1,520.9 |
| 2d Qtr | 34.3 | 26.1 | 3.4 | 30.2 | 282.6 | 70.0 | 113.6 | 77.5 | 482.9 | 57.0 | 250.9 | 194.7 | 64.2 | 1,687.4 |

Developed Countries: Exports to OPEC¹

(Continued)

Million US \$ (f.o.b.)

| | Algeria | Ecuador | Gabon | Indonesia | Iran | Iraq | Kuwait | Libya | Nigeria | Qatar | Saudi Arabia | UAE | Venezuela | Total |
|-----------|---------|---------|-------|-----------|-------|-------|--------|---------|---------|-------|--------------|-------|-----------|---------|
| Italy | | | | | | | | | | | | | | |
| 1974 | 325.7 | 25.5 | 6.6 | 58.0 | 282.4 | 96.0 | 65.7 | 853.8 | 131.0 | 11.0 | 133.2 | 37.3 | 211.6 | 2,237.8 |
| 1975 | 559.7 | 30.2 | 13.9 | 85.5 | 566.3 | 259.5 | 116.5 | 1,032.2 | 298.5 | 22.6 | 323.3 | 87.6 | 321.9 | 3,717.7 |
| 1976 | 408.5 | 22.6 | 14.9 | 53.1 | 730.6 | 203.2 | 175.2 | 955.5 | 317.4 | 25.7 | 636.1 | 133.2 | 350.4 | 4,026.4 |
| 1st Qtr | 104.5 | 4.3 | 2.4 | 12.3 | 140.4 | 42.7 | 26.3 | 186.0 | 46.2 | 6.7 | 96.3 | 23.8 | 63.9 | 755.8 |
| 2d Qtr | 77.9 | 4.8 | 3.2 | 18.4 | 193.5 | 67.6 | 39.1 | 232.8 | 74.2 | 5.2 | 127.5 | 28.8 | 77.7 | 950.7 |
| 3d Qtr | 97.1 | 6.2 | 4.0 | 11.8 | 198.6 | 48.4 | 46.9 | 265.6 | 92.4 | 7.5 | 155.0 | 31.0 | 92.1 | 1,056.6 |
| 4th Qtr | 129.0 | 7.3 | 5.3 | 10.6 | 198.1 | 44.5 | 62.9 | 271.1 | 104.6 | 6.3 | 257.3 | 49.6 | 116.7 | 1,263.3 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 126.8 | 5.9 | 7.3 | 11.5 | 193.6 | 53.6 | 53.9 | 269.7 | 122.4 | 9.0 | 211.4 | 45.6 | 124.8 | 1,235.5 |
| Apr & May | 99.4 | 6.9 | 6.7 | 6.8 | 153.6 | 33.0 | 43.8 | 229.4 | 102.3 | 7.5 | 160.9 | 33.5 | 97.1 | 980.9 |
| Canada | | | | | | | | | | | | | | |
| 1974 | 161.2 | 13.4 | 0 | 54.9 | 61.1 | 19.6 | 4.9 | 5.9 | 25.8 | 3.6 | 18.0 | 3.9 | 253.3 | 625.6 |
| 1975 | 99.3 | 21.4 | 0.5 | 63.7 | 144.7 | 66.5 | 15.7 | 22.4 | 37.6 | 1.5 | 34.3 | 4.5 | 314.5 | 826.6 |
| 1976 | 94.6 | 24.5 | 2.5 | 77.1 | 145.9 | 36.2 | 22.6 | 9.6 | 32.6 | 4.3 | 107.8 | 11.4 | 360.4 | 929.5 |
| 1st Qtr | 7.1 | 1.9 | 0.1 | 7.9 | 32.4 | 21.7 | 3.9 | 3.3 | 9.0 | 1.2 | 30.6 | 2.5 | 45.6 | 167.2 |
| 2d Qtr | 20.6 | 13.5 | 1.3 | 15.4 | 35.2 | 8.2 | 2.6 | 3.7 | 6.6 | 0.2 | 12.8 | 3.1 | 60.6 | 183.8 |
| 3d Qtr | 32.4 | 4.5 | 0.4 | 20.9 | 42.7 | 5.1 | 4.7 | 1.4 | 6.8 | 1.4 | 13.7 | 2.5 | 133.5 | 270.0 |
| 4th Qtr | 34.5 | 4.6 | 0.7 | 32.9 | 35.6 | 1.2 | 11.4 | 1.2 | 10.2 | 1.5 | 50.7 | 3.3 | 120.7 | 308.5 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 29.6 | 3.3 | 0.6 | 24.7 | 35.1 | 22.1 | 13.2 | 2.0 | 9.8 | 1.1 | 28.6 | 3.4 | 73.6 | 247.1 |
| 2d Qtr | 31.0 | 5.3 | 0.3 | 10.4 | 31.2 | 11.8 | 8.3 | 5.5 | 6.5 | 0.6 | 22.7 | 5.1 | 139.4 | 278.1 |

¹ Data are unadjusted.Developed Countries: Imports From OPEC¹

Million US \$ (c.i.f.)

| | Algeria | Ecuador | Gabon | Indonesia | Iran | Iraq | Kuwait | Libya | Nigeria | Qatar | Saudi Arabia | UAE | Venezuela | Total |
|----------------------------|---------|---------|-------|-----------|---------|-------|---------|---------|---------|-------|--------------|---------|-----------|----------|
| United States ² | | | | | | | | | | | | | | |
| 1974 | 1,090.5 | 473.0 | 162.3 | 1,688.1 | 2,132.2 | 0.9 | 13.4 | 1.4 | 3,286.2 | 79.6 | 1,671.2 | 366.3 | 4,671.1 | 15,636.2 |
| 1975 | 1,358.6 | 460.8 | 196.9 | 2,220.6 | 1,399.8 | 19.1 | 111.4 | 1,045.7 | 3,281.5 | 56.5 | 2,624.6 | 683.8 | 3,623.9 | 17,083.2 |
| 1976 | 2,209.4 | 539.0 | 189.8 | 3,004.3 | 1,480.1 | 110.0 | 37.6 | 2,243.4 | 4,937.6 | 119.0 | 5,212.9 | 1,359.2 | 3,574.6 | 25,016.9 |
| 1st Qtr | 447.5 | 109.4 | 51.3 | 714.4 | 378.0 | 1.2 | 25.7 | 485.0 | 1,016.8 | 22.2 | 1,152.9 | 272.7 | 893.3 | 5,570.4 |
| 2d Qtr | 529.9 | 123.5 | 65.0 | 692.5 | 345.3 | 0.3 | 4.3 | 478.7 | 1,141.5 | 8.2 | 1,166.2 | 288.2 | 738.1 | 5,581.7 |
| 3d Qtr | 674.8 | 136.2 | 20.3 | 851.1 | 397.1 | 35.1 | 4.9 | 603.9 | 1,365.3 | 57.4 | 1,506.3 | 363.9 | 935.5 | 6,951.8 |
| 4th Qtr | 557.2 | 169.9 | 53.2 | 746.3 | 359.7 | 73.4 | 2.7 | 675.8 | 1,414.0 | 31.2 | 1,387.5 | 434.4 | 1,007.7 | 6,913.0 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 695.7 | 155.4 | 58.2 | 914.0 | 657.5 | 45.1 | 66.2 | 820.5 | 1,646.7 | 41.1 | 1,603.2 | 405.8 | 1,214.6 | 8,324.0 |
| 2d Qtr | 743.2 | 171.1 | 62.3 | 926.7 | 699.3 | 126.3 | 72.5 | 1,080.5 | 1,598.1 | 74.3 | 1,720.8 | 439.0 | 958.5 | 8,672.6 |
| Japan | | | | | | | | | | | | | | |
| 1974 | 34.3 | 22.3 | 6.8 | 4,569.3 | 4,767.0 | 201.6 | 2,131.9 | 364.2 | 448.9 | 22.1 | 5,238.2 | 2,116.6 | 46.4 | 19,969.6 |
| 1975 | 36.4 | 13.5 | 12.8 | 3,431.2 | 4,978.3 | 395.6 | 2,009.7 | 280.1 | 278.6 | 27.6 | 6,132.9 | 1,773.4 | 33.9 | 19,404.0 |
| 1976 | 10.3 | 22.0 | 17.9 | 4,093.3 | 4,453.8 | 579.1 | 2,015.9 | 206.7 | 108.7 | 30.4 | 7,834.0 | 2,471.6 | 33.6 | 21,877.3 |
| 1st Qtr | 8.7 | 6.0 | 5.9 | 962.5 | 974.2 | 119.3 | 535.1 | 16.0 | 73.7 | 9.4 | 1,856.7 | 635.5 | 9.8 | 5,212.8 |
| 2d Qtr | 0.1 | 6.6 | 4.3 | 1,002.0 | 1,179.1 | 136.2 | 466.4 | 62.3 | 11.5 | 4.8 | 1,954.7 | 564.2 | 7.6 | 5,399.8 |
| 3d Qtr | 0.7 | 4.1 | 4.8 | 1,021.7 | 952.6 | 119.1 | 505.1 | 69.0 | 18.2 | 11.3 | 2,064.4 | 629.5 | 5.9 | 5,406.4 |
| 4th Qtr | 0.8 | 5.3 | 2.9 | 1,107.1 | 1,347.9 | 204.5 | 509.3 | 59.4 | 5.3 | 4.9 | 1,958.2 | 642.4 | 10.3 | 5,858.3 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 1.7 | 5.0 | 2.5 | 1,252.5 | 1,181.0 | 187.4 | 514.8 | 14.3 | 3.8 | 45.1 | 2,328.1 | 699.0 | 10.6 | 6,245.8 |
| Apr | 0 | 1.6 | 0.4 | 390.9 | 249.6 | 62.4 | 181.1 | 2.7 | 4.2 | 23.5 | 678.9 | 177.4 | 3.8 | 1,776.5 |
| West Germany | | | | | | | | | | | | | | |
| 1974 | 1,090.8 | 66.1 | 97.7 | 188.7 | 1,240.3 | 305.3 | 355.0 | 1,633.1 | 1,101.4 | 92.9 | 2,044.1 | 732.1 | 243.9 | 9,211.4 |
| 1975 | 1,025.4 | 62.0 | 107.4 | 153.4 | 1,467.4 | 127.9 | 226.9 | 1,391.1 | 962.4 | 124.0 | 1,623.1 | 736.0 | 232.1 | 8,239.1 |

Developed Countries: Imports From OPEC¹

(Continued)

Million US \$ (c.i.f.)

| | Algeria | Ecuador | Gabon | Indonesia | Iran | Iraq | Kuwait | Libya | Nigeria | Qatar | Saudi Arabia | UAE | Venezuela | Total |
|----------------|---------|---------|-------|-----------|---------|---------|---------|---------|---------|-------|--------------|---------|-----------|----------|
| West Germany | | | | | | | | | | | | | | |
| (Continued) | | | | | | | | | | | | | | |
| 1976 | 1,145.7 | 67.3 | 69.3 | 213.6 | 1,987.5 | 154.7 | 182.1 | 2,103.3 | 975.1 | 124.6 | 1,798.1 | 691.1 | 207.9 | 9,720.3 |
| 1st Qtr | 264.0 | 13.4 | 21.2 | 48.2 | 426.0 | 27.3 | 51.3 | 473.6 | 251.6 | 26.3 | 388.7 | 153.6 | 44.3 | 2,189.5 |
| 2d Qtr | 292.8 | 14.4 | 21.2 | 35.4 | 410.3 | 33.2 | 55.3 | 474.9 | 232.8 | 41.3 | 367.3 | 167.4 | 76.7 | 2,223.0 |
| 3d Qtr | 305.7 | 12.1 | 13.0 | 62.1 | 526.8 | 57.0 | 38.1 | 544.0 | 238.7 | 0.1 | 554.8 | 177.9 | 45.1 | 2,575.4 |
| 4th Qtr | 283.2 | 27.4 | 13.9 | 67.9 | 624.4 | 37.2 | 37.4 | 610.8 | 252.0 | 56.9 | 487.3 | 192.2 | 41.8 | 2,732.4 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 328.6 | 20.8 | 16.0 | 96.8 | 496.1 | 38.8 | 44.6 | 623.8 | 232.3 | 16.6 | 436.7 | 197.0 | 30.0 | 2,578.1 |
| Apr | 66.0 | 7.3 | 4.0 | 24.0 | 160.2 | 0.5 | 20.0 | 152.5 | 84.2 | 22.3 | 131.7 | 72.4 | 10.5 | 755.6 |
| France | | | | | | | | | | | | | | |
| 1974 | 957.7 | 9.7 | 320.8 | 61.5 | 716.3 | 1,242.3 | 938.5 | 386.8 | 872.8 | 204.0 | 3,028.3 | 1,184.6 | 133.5 | 10,116.8 |
| 1975 | 747.2 | 15.7 | 246.8 | 55.2 | 1,286.1 | 1,128.5 | 652.0 | 200.6 | 859.4 | 211.9 | 3,041.6 | 1,134.4 | 86.1 | 9,665.5 |
| 1976 | 691.4 | 13.2 | 293.8 | 97.2 | 1,436.1 | 1,590.6 | 409.1 | 320.3 | 749.4 | 326.1 | 4,079.1 | 1,235.3 | 94.0 | 11,335.6 |
| 1st Qtr | 179.8 | 3.7 | 64.2 | 14.4 | 358.9 | 281.5 | 63.1 | 78.7 | 207.3 | 98.4 | 982.4 | 452.7 | 32.6 | 2,817.7 |
| 2d Qtr | 170.7 | 2.8 | 74.1 | 21.5 | 315.8 | 331.6 | 120.4 | 89.4 | 173.0 | 74.2 | 977.1 | 238.5 | 20.7 | 2,609.8 |
| 3d Qtr | 155.3 | 1.9 | 79.1 | 27.1 | 331.4 | 400.0 | 111.7 | 65.4 | 152.6 | 80.0 | 1,033.5 | 264.4 | 20.3 | 2,722.7 |
| 4th Qtr | 185.6 | 4.8 | 76.4 | 34.2 | 430.0 | 577.5 | 113.9 | 86.8 | 216.5 | 73.5 | 1,086.1 | 279.7 | 20.4 | 3,185.4 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 196.5 | 5.5 | 88.1 | 30.7 | 448.6 | 470.7 | 125.5 | 65.4 | 209.4 | 99.5 | 1,033.5 | 263.5 | 19.5 | 3,056.4 |
| Apr | 54.5 | 3.5 | 32.8 | 13.6 | 134.1 | 135.4 | 23.8 | 16.3 | 84.9 | 16.4 | 304.5 | 53.3 | 6.0 | 879.1 |
| United Kingdom | | | | | | | | | | | | | | |
| 1974 | 83.8 | 5.1 | 66.1 | 33.8 | 1,202.9 | 248.6 | 1,334.0 | 913.6 | 860.6 | 388.5 | 2,757.8 | 483.9 | 315.9 | 8,694.6 |
| 1975 | 189.8 | 4.6 | 8.1 | 33.2 | 1,554.3 | 226.1 | 935.5 | 288.5 | 685.0 | 348.5 | 1,915.3 | 356.6 | 366.8 | 6,912.3 |
| 1976 | 147.3 | 4.6 | 16.3 | 39.9 | 1,879.0 | 492.6 | 1,042.7 | 297.4 | 574.9 | 456.1 | 1,763.9 | 362.6 | 215.4 | 7,292.7 |
| 1st Qtr | 54.6 | 0.9 | 1.2 | 7.8 | 425.9 | 70.1 | 223.3 | 70.1 | 160.9 | 149.0 | 492.1 | 98.2 | 70.1 | 1,824.2 |
| 2d Qtr | 30.2 | 1.2 | 9.6 | 8.9 | 478.6 | 69.5 | 230.0 | 42.0 | 167.9 | 145.3 | 386.5 | 103.0 | 64.9 | 1,737.6 |
| 3d Qtr | 41.4 | 1.3 | 3.0 | 13.4 | 473.3 | 196.7 | 225.7 | 98.2 | 138.4 | 103.3 | 444.9 | 103.2 | 50.8 | 1,893.6 |
| 4th Qtr | 21.1 | 1.2 | 2.5 | 9.8 | 501.2 | 156.3 | 363.7 | 87.1 | 107.7 | 58.5 | 440.4 | 58.2 | 29.6 | 1,837.3 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 26.8 | 0.9 | 2.3 | 9.2 | 482.0 | 138.5 | 224.3 | 29.8 | 159.3 | 99.4 | 498.6 | 92.0 | 19.9 | 1,783.0 |
| 2d Qtr | 20.7 | 2.2 | 1.1 | 11.0 | 359.3 | 146.0 | 282.7 | 81.0 | 68.9 | 32.7 | 558.7 | 102.1 | 35.3 | 1,701.7 |
| Italy | | | | | | | | | | | | | | |
| 1974 | 268.2 | 25.1 | 56.0 | 72.4 | 1,123.3 | 1,166.4 | 478.6 | 2,364.8 | 360.6 | 208.1 | 3,047.0 | 108.3 | 105.3 | 9,384.1 |
| 1975 | 405.3 | 34.0 | 41.7 | 53.4 | 1,134.5 | 1,672.3 | 357.9 | 1,248.4 | 67.6 | 127.1 | 2,351.2 | 201.1 | 159.7 | 7,854.2 |
| 1976 | 296.8 | 25.4 | 16.4 | 114.7 | 1,218.9 | 1,304.2 | 203.2 | 1,587.0 | 55.8 | 140.1 | 2,423.8 | 236.8 | 208.1 | 7,831.2 |
| 1st Qtr | 81.3 | 4.8 | 1.9 | 21.4 | 290.5 | 313.3 | 17.9 | 351.8 | 10.7 | 33.5 | 471.3 | 62.9 | 27.8 | 1,689.1 |
| 2d Qtr | 73.1 | 6.1 | 5.0 | 24.9 | 309.1 | 284.5 | 26.5 | 481.4 | 12.7 | 39.9 | 729.8 | 49.6 | 49.1 | 2,091.7 |
| 3d Qtr | 76.5 | 7.8 | 5.5 | 30.1 | 303.4 | 356.9 | 71.9 | 403.1 | 17.8 | 18.9 | 632.6 | 41.5 | 68.9 | 2,034.9 |
| 4th Qtr | 65.9 | 6.7 | 4.0 | 38.3 | 315.9 | 349.5 | 86.9 | 350.7 | 14.6 | 47.8 | 590.1 | 82.8 | 62.3 | 2,015.5 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 40.5 | 7.7 | 13.2 | 33.3 | 340.9 | 370.9 | 168.2 | 355.1 | 30.5 | 26.5 | 644.8 | 96.5 | 37.5 | 2,165.6 |
| Apr & May | 32.7 | 7.9 | 5.3 | 26.7 | 249.6 | 297.0 | 96.2 | 273.8 | 17.3 | 20.0 | 517.7 | 41.0 | 20.2 | 1,605.4 |
| Canada | | | | | | | | | | | | | | |
| 1974 | 6.9 | 40.0 | 4.9 | 4.7 | 633.6 | 37.2 | 66.0 | 31.3 | 55.1 | 0 | 325.4 | 88.0 | 1,320.0 | 2,613.1 |
| 1975 | 1.7 | 20.8 | 25.4 | 14.0 | 745.3 | 131.7 | 108.7 | 35.5 | 77.0 | 6.3 | 733.3 | 138.2 | 1,088.0 | 3,125.9 |
| 1976 | 66.1 | 30.6 | 62.4 | 18.4 | 704.9 | 135.5 | 22.7 | 106.1 | 157.6 | 0 | 488.8 | 62.8 | 1,314.8 | 3,170.7 |
| 1st Qtr | 19.1 | 3.8 | 11.2 | 2.2 | 211.0 | 30.6 | 6.4 | 51.1 | 85.1 | 0 | 118.3 | 36.0 | 268.2 | 843.0 |
| 2d Qtr | 19.5 | 7.2 | 8.1 | 4.2 | 211.5 | 28.4 | 6.5 | 35.0 | 48.8 | 0 | 126.6 | 19.7 | 439.3 | 954.8 |
| 3d Qtr | 4.4 | 5.0 | 22.8 | 6.0 | 132.5 | 47.9 | 9.8 | 20.0 | 15.9 | 0 | 141.4 | 7.1 | 302.4 | 715.2 |
| 4th Qtr | 23.1 | 14.6 | 20.3 | 6.0 | 149.9 | 28.6 | 0 | 0 | 7.8 | 0 | 102.5 | 0 | 304.9 | 657.7 |
| 1977 | | | | | | | | | | | | | | |
| 1st Qtr | 9.2 | 22.1 | 13.8 | 3.9 | 125.7 | 23.0 | 0 | 0 | 13.3 | 0 | 191.9 | 0 | 338.8 | 741.7 |
| 2d Qtr | 11.0 | 15.9 | 0 | 6.4 | 136.5 | 0.1 | 0 | 0 | 0.1 | 0 | 167.3 | 0 | 339.5 | 676.8 |

¹ Data are unadjusted.² Data are f.a.s.³ Data are f.o.b.

Thousand b/d

| | | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| United States ¹ | Annual | | | | | | |
| | Average | 16,367 | 17,308 | 16,653 | 16,322 | 17,444 | |
| | Jan | 16,735 | 18,713 | 17,286 | 18,004 | 18,593 | 20,481 |
| | Feb | 17,861 | 19,094 | 17,366 | 17,084 | 17,429 | 20,427 |
| | Mar | 16,870 | 17,216 | 16,104 | 16,315 | 17,299 | 18,056 |
| | Apr | 15,529 | 15,921 | 15,929 | 16,048 | 16,671 | 17,570 |
| | May | 14,801 | 16,626 | 15,726 | 15,155 | 15,977 | (est.) 17,252 |
| | Jun | 15,615 | 16,481 | 16,117 | 15,610 | 16,836 | (est.) 17,600 |
| | Jul | 14,821 | 16,372 | 16,349 | 15,740 | 16,613 | (est.) 17,697 |
| | Aug | 15,936 | 17,499 | 16,550 | 15,806 | 16,642 | (est.) 18,533 |
| | Sep | 15,489 | 16,656 | 16,024 | 15,768 | 16,825 | (est.) 17,885 |
| | Oct | 16,455 | 17,202 | 17,050 | 16,377 | 17,052 | |
| | Nov | 17,610 | 18,492 | 17,351 | 15,777 | 18,847 | |
| | Dec | 18,738 | 17,538 | 18,013 | 18,185 | 20,506 | |
| Canada | Annual | | | | | | |
| | Average | 1,511 | 1,597 | 1,630 | 1,595 | 1,658 | |
| | Jan | 1,536 | 1,667 | 1,823 | 1,691 | 1,785 | 1,797 |
| | Feb | 1,793 | 1,747 | 1,863 | 1,872 | 1,754 | 1,919 |
| | Mar | 1,612 | 1,584 | 1,659 | 1,558 | 1,747 | 1,664 |
| | Apr | 1,367 | 1,431 | 1,560 | 1,592 | 1,518 | 1,526 |
| | May | 1,374 | 1,486 | 1,577 | 1,471 | 1,509 | 1,523 |
| | Jun | 1,334 | 1,474 | 1,455 | 1,550 | 1,560 | 1,633 |
| | Jul | 1,294 | 1,490 | 1,534 | 1,493 | 1,531 | 1,530 |
| | Aug | 1,394 | 1,557 | 1,463 | 1,449 | 1,585 | |
| | Sep | 1,402 | 1,427 | 1,415 | 1,469 | 1,514 | |
| | Oct | 1,577 | 1,680 | 1,680 | 1,555 | 1,560 | |
| | Nov | 1,685 | 1,801 | 1,714 | 1,577 | 1,822 | |
| | Dec | 1,782 | 1,828 | 1,831 | 1,880 | 2,008 | |
| Japan | Annual | | | | | | |
| | Average | N.A. | 5,000 | 4,872 | 4,568 | 4,786 | |
| | Jan | N.A. | 5,036 | 5,103 | 4,729 | 4,941 | 5,428 |
| | Feb | N.A. | 5,352 | 5,664 | 5,191 | 5,246 | 6,019 |
| | Mar | N.A. | 5,306 | 5,407 | 4,918 | 5,165 | 5,540 |
| | Apr | N.A. | 4,737 | 4,706 | 4,202 | 4,526 | 4,713 |
| | May | N.A. | 4,597 | 4,568 | 4,041 | 4,218 | 4,313 |
| | Jun | N.A. | 4,776 | 4,520 | 4,135 | 4,429 | 4,480 |
| | Jul | N.A. | 4,586 | 4,385 | 4,265 | 4,416 | 4,700 |
| | Aug | N.A. | 4,684 | 4,576 | 4,234 | 4,461 | |
| | Sep | N.A. | 4,778 | 4,720 | 4,543 | 4,517 | |
| | Oct | N.A. | 5,093 | 4,614 | 4,409 | 4,523 | |
| | Nov | N.A. | 5,559 | 4,925 | 4,747 | 5,160 | |
| | Dec | N.A. | 5,526 | 5,330 | 5,447 | 5,846 | |
| Austria | Annual | | | | | | |
| | Average | 203 | 227 | 203 | 199 | 215 | |
| | Jan | 189 | 220 | 236 | 183 | 207 | 200 |
| | Feb | 221 | 225 | 220 | 190 | 208 | 208 |
| | Mar | 212 | 224 | 160 | 172 | 209 | 182 |
| | Apr | 183 | 204 | 169 | 184 | 156 | 197 |
| | May | 174 | 210 | 172 | 156 | 169 | 166 |
| | Jun | 181 | 200 | 169 | 186 | 189 | 208 |
| | Jul | 179 | 221 | 214 | 210 | 219 | 192 |
| | Aug | 187 | 222 | 218 | 223 | 229 | 213 |
| | Sep | 213 | 227 | 222 | 232 | 246 | |
| | Oct | 227 | 253 | 243 | 226 | 233 | |
| | Nov | 246 | 276 | 215 | 201 | 252 | |
| | Dec | 230 | 234 | 203 | 229 | 261 | |
| Belgium/Luxembourg | Annual | | | | | | |
| | Average | 485 | 505 | 440 | 416 | 449 | |
| | Jan | 535 | 543 | 512 | 550 | 498 | 552 |
| | Feb | 591 | 589 | 528 | 558 | 547 | 507 |
| | Mar | 546 | 570 | 392 | 410 | 469 | 517 |
| | Apr | 470 | 565 | 383 | 465 | 460 | |

Thousand b/d

| | | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|-----------------------------------|---------|-------|-------|-------|-------|-------|-------|
| Belgium/Luxembourg (Continued) | May | 454 | 483 | 419 | 363 | 357 | |
| | Jun | 464 | 463 | 376 | 366 | 383 | |
| | Jul | 346 | 359 | 339 | 288 | 308 | |
| | Aug | 367 | 389 | 352 | 331 | 361 | |
| | Sep | 479 | 465 | 478 | 372 | 425 | |
| | Oct | 484 | 556 | 534 | 442 | 424 | |
| | Nov | 563 | 558 | 427 | 439 | 532 | |
| | Dec | 530 | 503 | 542 | 508 | 628 | |
| | Annual | | | | | | |
| | Average | | | | 301 | 307 | |
| Denmark | Jan | N.A. | N.A. | N.A. | 332 | 358 | 370 |
| | Feb | N.A. | N.A. | N.A. | 380 | 398 | 405 |
| | Mar | N.A. | N.A. | N.A. | 317 | 367 | 362 |
| | Apr | N.A. | N.A. | N.A. | 354 | 307 | 340 |
| | May | N.A. | N.A. | N.A. | 258 | 242 | 241 |
| | Jun | N.A. | N.A. | N.A. | 257 | 250 | 236 |
| | Jul | N.A. | N.A. | N.A. | 218 | 184 | 192 |
| | Aug | N.A. | N.A. | N.A. | 264 | 261 | 293 |
| | Sep | N.A. | N.A. | N.A. | 262 | 274 | |
| | Oct | N.A. | N.A. | N.A. | 302 | 280 | |
| | Nov | N.A. | N.A. | N.A. | 324 | 356 | |
| | Dec | N.A. | N.A. | N.A. | 353 | 414 | |
| | Annual | | | | | | |
| France | Average | 1,985 | 2,219 | 2,094 | 1,925 | 2,071 | |
| | Jan | 2,276 | 2,743 | 2,523 | 2,190 | 2,432 | 2,518 |
| | Feb | 2,450 | 2,687 | 2,389 | 2,243 | 2,492 | 2,386 |
| | Mar | 2,100 | 2,528 | 2,249 | 1,952 | 2,372 | 2,109 |
| | Apr | 1,848 | 2,296 | 1,970 | 2,202 | 2,116 | 2,044 |
| | May | 1,743 | 1,890 | 1,915 | 1,640 | 1,795 | 1,846 |
| | Jun | 1,597 | 1,685 | 2,103 | 1,642 | 1,603 | 1,717 |
| | Jul | 1,444 | 1,566 | 1,703 | 1,491 | 1,624 | 1,349 |
| | Aug | 1,441 | 1,495 | 1,506 | 1,300 | 1,668 | 1,390 |
| | Sep | 1,950 | 1,932 | 1,996 | 1,785 | 1,966 | 1,789 |
| | Oct | 2,106 | 2,482 | 2,045 | 1,917 | 1,908 | |
| | Nov | 2,332 | 2,593 | 2,260 | 2,077 | 2,204 | |
| | Dec | 2,574 | 2,768 | 2,492 | 2,658 | 2,687 | |
| | Annual | | | | | | |
| Italy | Average | 1,435 | 1,525 | 1,521 | 1,468 | 1,502 | |
| | Jan | 1,720 | 1,781 | 1,755 | 1,792 | 1,775 | 1,683 |
| | Feb | 1,756 | 1,866 | 1,760 | 1,767 | 1,743 | 1,809 |
| | Mar | 1,450 | 1,710 | 1,579 | 1,558 | 1,641 | 1,548 |
| | Apr | 1,169 | 1,420 | 1,421 | 1,530 | 1,423 | 1,363 |
| | May | 1,138 | 1,285 | 1,349 | 1,174 | 1,253 | 1,252 |
| | Jun | 1,101 | 1,255 | 1,314 | 1,289 | 1,236 | 1,324 |
| | Jul | 1,175 | 1,303 | 1,368 | 1,234 | 1,355 | 1,233 |
| | Aug | 1,129 | 1,255 | 1,287 | 1,105 | 1,372 | 1,135 |
| | Sep | 1,450 | 1,462 | 1,527 | 1,465 | 1,592 | 1,682 |
| | Oct | 1,650 | 1,610 | 1,569 | 1,679 | 1,464 | |
| | Nov | 1,702 | 1,551 | 1,580 | 1,448 | 1,393 | |
| | Dec | 1,899 | 1,698 | 1,753 | 1,600 | 1,779 | |
| | Annual | | | | | | |
| Netherlands | Average | 496 | 507 | 444 | 412 | 487 | |
| | Jan | 509 | 584 | 468 | 399 | 480 | 521 |
| | Feb | 591 | 586 | 522 | 430 | 542 | 524 |
| | Mar | 557 | 542 | 438 | 379 | 543 | 518 |
| | Apr | 512 | 541 | 530 | 474 | 443 | 424 |
| | May | 453 | 475 | 432 | 390 | 453 | 393 |
| | Jun | 430 | 436 | 427 | 403 | 462 | 456 |
| | Jul | 374 | 408 | 415 | 354 | 426 | 388 |
| | Aug | 435 | 437 | 414 | 364 | 446 | |
| | Sep | 440 | 485 | 440 | 412 | 493 | |

Selected OECD Countries: Trends in Inland Oil Consumption
(Continued)

| | | Thousand b/d | | | | | |
|-------------------------|---------|--------------|-------|-------|-------|-------|-------|
| | | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
| Netherlands (Continued) | Oct | 515 | 594 | 472 | 440 | 469 | |
| | Nov | 581 | 503 | 440 | 419 | 517 | |
| | Dec | 567 | 505 | 433 | 484 | 576 | |
| | Annual | | | | | | |
| Norway | Average | N.A. | N.A. | 143 | 150 | 163 | |
| | Jan | N.A. | N.A. | 155 | 142 | 161 | 177 |
| | Feb | N.A. | N.A. | 154 | 171 | 180 | 202 |
| | Mar | N.A. | N.A. | 124 | 137 | 181 | 189 |
| | Apr | N.A. | N.A. | 126 | 149 | 145 | 162 |
| | May | N.A. | N.A. | 118 | 145 | 147 | 150 |
| | Jun | N.A. | N.A. | 141 | 130 | 153 | 159 |
| | Jul | N.A. | N.A. | 113 | 120 | 130 | 131 |
| | Aug | N.A. | N.A. | 125 | 140 | 146 | 156 |
| | Sep | N.A. | N.A. | 151 | 161 | 168 | |
| | Oct | N.A. | N.A. | 161 | 162 | 167 | |
| | Nov | N.A. | N.A. | 174 | 181 | 175 | |
| | Dec | N.A. | N.A. | 180 | 162 | 197 | |
| | Annual | | | | | | |
| Spain | Average | 471 | 581 | 626 | 667 | 744 | |
| | Jan | 483 | 539 | 610 | 720 | 758 | 740 |
| | Feb | 508 | 568 | 639 | 682 | 785 | 727 |
| | Mar | 461 | 564 | 571 | 625 | 769 | 660 |
| | Apr | 447 | 537 | 595 | 688 | 742 | 634 |
| | May | 444 | 523 | 620 | 622 | 685 | 669 |
| | Jun | 472 | 530 | 608 | 610 | 714 | 672 |
| | Jul | 457 | 466 | 630 | 624 | 755 | 677 |
| | Aug | 462 | 667 | 617 | 584 | 685 | 615 |
| | Sep | 477 | 576 | 636 | 667 | 734 | |
| | Oct | 459 | 669 | 677 | 713 | 742 | |
| | Nov | 500 | 646 | 653 | 706 | 780 | |
| | Dec | 515 | 681 | 650 | 735 | 782 | |
| | Annual | | | | | | |
| Sweden | Average | N.A. | 533 | 490 | 478 | 529 | |
| | Jan | N.A. | 603 | 521 | 511 | 565 | 606 |
| | Feb | N.A. | 555 | 415 | 547 | 530 | 600 |
| | Mar | N.A. | 540 | 427 | 479 | 539 | 545 |
| | Apr | N.A. | 506 | 441 | 532 | 450 | 499 |
| | May | N.A. | 524 | 495 | 392 | 395 | 466 |
| | Jun | N.A. | 420 | 464 | 511 | 410 | 409 |
| | Jul | N.A. | 387 | 423 | 362 | 382 | 377 |
| | Aug | N.A. | 455 | 463 | 459 | 483 | |
| | Sep | N.A. | 492 | 516 | 503 | 571 | |
| | Oct | N.A. | 656 | 553 | 462 | 585 | |
| | Nov | N.A. | 645 | 568 | 446 | 697 | |
| | Dec | N.A. | 618 | 581 | 538 | 740 | |
| | Annual | | | | | | |
| United Kingdom | Average | 1,954 | 1,974 | 1,857 | 1,633 | 1,603 | |
| | Jan | 2,121 | 2,315 | 2,045 | 1,981 | 1,679 | 1,830 |
| | Feb | 2,401 | 2,313 | 2,127 | 1,907 | 1,865 | 1,844 |
| | Mar | 2,249 | 2,271 | 2,133 | 1,731 | 1,879 | 1,818 |
| | Apr | 2,027 | 2,038 | 1,899 | 1,826 | 1,716 | 1,670 |
| | May | 1,851 | 1,939 | 1,704 | 1,482 | 1,417 | 1,546 |
| | Jun | 1,745 | 1,697 | 1,545 | 1,416 | 1,416 | 1,454 |
| | Jul | 1,519 | 1,637 | 1,531 | 1,322 | 1,346 | 1,302 |
| | Aug | 1,527 | 1,615 | 1,513 | 1,208 | 1,276 | |
| | Sep | 1,703 | 1,727 | 1,663 | 1,501 | 1,477 | |
| | Oct | 1,959 | 2,150 | 2,049 | 1,707 | 1,544 | |
| | Nov | 2,194 | 2,258 | 2,108 | 1,723 | 1,750 | |
| | Dec | 2,132 | 1,906 | 1,983 | 1,821 | 1,869 | |
| | Annual | | | | | | |

(Continued)

| | | Thousand b/d | | | | | |
|--------------|---------|--------------|-------|-------|-------|-------|-------|
| | | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
| West Germany | Annual | | | | | | |
| | Average | 2,521 | 2,693 | 2,408 | 2,319 | 2,507 | |
| | Jan | 2,545 | 2,868 | 2,556 | 2,183 | 2,464 | 2,389 |
| | Feb | 2,803 | 2,850 | 1,969 | 2,455 | 2,497 | 2,441 |
| | Mar | 2,525 | 2,707 | 2,173 | 2,234 | 2,747 | 2,519 |
| | Apr | 2,347 | 2,809 | 2,539 | 2,431 | 2,339 | 2,425 |
| | May | 2,335 | 2,546 | 2,403 | 2,253 | 2,320 | 2,359 |
| | Jun | 2,632 | 2,674 | 2,414 | 2,106 | 2,393 | 2,495 |
| | Jul | 2,188 | 2,196 | 2,548 | 2,319 | 2,624 | 2,381 |
| | Aug | 2,444 | 2,738 | 2,476 | 2,360 | 2,515 | 2,468 |
| | Sep | 2,487 | 2,618 | 2,473 | 2,309 | 2,521 | |
| | Oct | 2,522 | 2,969 | 2,613 | 2,328 | 2,391 | |
| | Nov | 2,667 | 2,883 | 2,432 | 2,361 | 2,700 | |
| | Dec | 2,783 | 2,481 | 2,261 | 2,502 | 2,571 | |

¹ Including bunkers, refinery fuel, and losses.² Principal products only.

Selected OECD Countries: Oil Stocks

Thousand Barrels, End of Month

| | | United States | Japan | Canada | Austria | Belgium | Denmark | France | Ireland | Italy | |
|------|------------------|------------------------|------------------|---------|----------|---------|---------|------------------|---------|-------------------|-----------------|
| 1973 | Sep | 1,057,911 ¹ | 300,000 | 113,193 | N.A. | N.A. | 30,996 | 194,122 | 5,555 | N.A. | |
| 1974 | Jan | 1,017,333 ¹ | 275,000 | 125,289 | 7,650 | 35,018 | 25,017 | 174,594 | 5,490 | N.A. | |
| | Mar | 995,365 ¹ | 257,000 | 116,060 | 8,358 | 25,404 | 25,649 | 171,229 | 6,037 | 143,876 | |
| | Jun | 1,102,467 ¹ | 325,000 | N.A. | 10,454 | 31,375 | 28,025 | 196,406 | 6,190 | 163,922 | |
| | Sep | 1,156,105 ¹ | 359,000 | 148,305 | 9,278 | 37,011 | 34,507 | 238,630 | 6,504 | 177,310 | |
| | Dec | 1,115,916 ¹ | 334,000 | 142,233 | 9,402 | 40,274 | 37,223 | 235,848 | 7,424 | 173,609 | |
| 1975 | Jan | 1,099,144 | 330,000 | 136,590 | 9,826 | 40,406 | 33,609 | 230,271 | 7,687 | 147,431 | |
| | Mar | 1,076,360 | 296,000 | 133,805 | 9,220 | 38,902 | 34,595 | 215,365 | 7,439 | 150,124 | |
| | Jun | 1,071,150 | 314,000 | 140,617 | 10,257 | 36,704 | 34,566 | 203,831 | 7,665 | 169,776 | |
| | Sep | 1,147,338 | 330,000 | 147,939 | 8,913 | 41,420 | 44,238 | 223,942 | 7,599 | 174,010 | |
| | Dec | 1,132,955 | 325,000 | 138,462 | 7,329 | 40,194 | 40,325 | 195,998 | 7,081 | N.A. | |
| 1976 | Jan ² | 1,102,282 | 308,000 | 128,356 | 6,877 | 38,508 | 39,223 | 182,887 | 6,825 | N.A. | |
| | Mar | 1,060,489 | 290,000 | 121,490 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | |
| | Jun | 1,108,703 | 325,000 | 132,174 | 6,855 | 41,676 | 31,193 | 167,017 | 7,315 | N.A. | |
| | Sep | 1,206,690 | 365,000 | 138,211 | 8,110 | 41,537 | 40,661 | 209,692 | 7,877 | N.A. | |
| | Dec | 1,129,445 | 359,000 | 125,934 | 7,680 | 43,092 | 37,478 | 203,407 | 7,628 | 157,687 | |
| 1977 | Jan | 1,064,915 | 364,000 | 126,025 | 7,059 | 43,683 | 36,383 | 192,676 | 7,242 | 155,811 | |
| | Feb | 1,050,507 | 315,000 | 120,857 | 8,358 | 42,880 | 33,544 | 188,347 | 7,271 | 154,322 | |
| | Mar | 1,086,822 | 327,000 | 125,757 | 9,074 | 42,880 | 33,361 | 183,303 | 7,110 | 151,110 | |
| | Apr | 1,121,008 | 332,000 | 122,770 | 9,454 | 43,187 | 32,551 | 187,048 | 7,154 | 166,973 | |
| | May | 1,171,222 | 358,000 | 129,467 | 9,373 | 44,085 | 34,128 | 174,010 | 8,497 | 170,893 | |
| | Jun | 1,209,500 | 362,000 | 138,808 | 8,541 | 43,618 | 36,215 | 184,354 | 9,388 | N.A. | |
| | Jul | 1,239,100 | 356,000 | 139,053 | 9,044 | 45,552 | 38,654 | 197,480 | 9,943 | 164,900 | |
| | Aug | 1,251,800 | 361,000 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | |
| | Sep | 1,284,900 | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | N.A. | |
| | | Luxem- bourg | Nether- lands | Norway | Portugal | Spain | Sweden | Switzer- land | Turkey | United Kingdom | West Germany |
| 1973 | Sep | N.A. | N.A. | 8,045 | 7,125 | N.A. | 43,398 | 26,514 | N.A. | 152,261 | 172,010 |
| 1974 | Jan | N.A. | N.A. | 8,446 | 5,745 | 40,449 | 37,668 | 25,995 | N.A. | 131,239 | 149,190 |
| | Mar | N.A. | N.A. | 9,176 | 7,840 | 47,414 | 39,128 | 26,382 | 9,979 | 134,816 | 165,549 |
| | Jun | N.A. | N.A. | 10,476 | 7,307 | 50,217 | 43,034 | 26,966 | 9,446 | 167,637 | 170,827 |
| | Sep | N.A. | N.A. | 10,541 | 7,264 | 53,538 | 47,815 | 26,309 | 12,527 | 175,236 | 187,968 |
| | Dec | N.A. | 66,452 | 7,037 | 7,037 | 53,261 | 44,749 | 29,638 | 9,345 | 160,593 | 187,938 |
| 1975 | Jan | 1,708 | 65,269 | 8,650 | 6,344 | 40,449 | 43,727 | 29,025 | 8,234 | 169,623 | 171,192 |
| | Mar | 1,745 | 61,430 | 9,672 | 6,110 | 50,611 | 39,785 | 26,928 | 8,088 | 145,248 | 158,169 |
| | Jun | 2,102 | 62,941 | 9,789 | 5,928 | 48,633 | 34,675 | 27,652 | 10,220 | 147,949 | 161,520 |
| | Sep | 2,139 | 63,758 | 10,986 | 6,446 | 51,677 | 40,114 | 29,623 | 11,213 | 154,921 | 184,267 |
| | Dec | 2,044 | 60,086 | 11,614 | 8,541 | 50,201 | 43,180 | 29,762 | N.A. | 138,941 | 186,668 |
| 1976 | Jan | 2,015 | 53,195 | 12,410 | 5,533 | 48,728 | 42,742 | 29,200 | N.A. | N.A. | 184,829 |
| | Mar | 1,832 | 52,932 | 9,570 | 7,234 | N.A. | 37,668 | 27,528 | N.A. | N.A. | 175,483 |
| | Jun | 1,971 | 54,560 | 11,154 | 6,658 | N.A. | 37,194 | 28,587 | N.A. | 135,291 | 189,092 |
| | Sep | 1,986 | 61,656 | 12,038 | 6,066 | 50,582 | 37,194 | 29,799 | N.A. | 140,686 | 201,845 |
| | Dec | 2,008 | 56,568 | 12,468 | 8,176 | N.A. | 48,326 | 31,178 | 9,541 | 136,065 | 218,540 |
| 1977 | Jan | 2,008 | 53,618 | 12,673 | 9,855 | 61,320 | 45,954 | 32,047 | 8,636 | 133,320 | 217,474 |
| | Mar | 1,978 | 53,078 | 9,833 | 7,205 | 66,576 | 40,478 | 31,032 | 7,169 | 124,217 | 211,423 |
| | Jun | 2,022 | 58,765 | 12,695 | 7,753 | 67,240 | 46,070 | 35,514 | 10,731 | 129,020 | 219,781 |
| | Jul | 2,044 | 62,481 | 12,790 | 7,358 | 67,897 | 46,143 | 34,274 | N.A. | 132,422 | 224,380 |

¹ Estimated.² As of January 1977, US Bureau of Mines changed the reporting of crude oil stocks to include foreign crude oil not yet received at refineries. Figures for 1976 and 1977 have been computed on the new basis.

Estimated OECD Oil Consumption ¹

Million b/d

| | 1st Qtr | 2d Qtr | 3d Qtr | 4th Qtr |
|------|---------|--------|--------|---------|
| 1973 | 43.2 | 37.6 | 36.8 | 42.4 |
| 1974 | 39.6 | 35.9 | 36.3 | 39.0 |
| 1975 | 37.9 | 34.2 | 34.2 | 37.6 |
| 1976 | 39.9 | 35.7 | 36.2 | 41.1 |
| 1977 | 42.5 | 37.1 | | |

¹ Excluding Australia and New Zealand, and including US refinery gain.

Western Europe: Oil Spot Market Prices

US \$ per Barrel

| | F.O.B. Rotterdam ¹ | | | | F.O.B. Italy ¹ | | | |
|---------|-------------------------------|-------------|---------|--------------------|---------------------------|-------------|---------|--------------------|
| | Heavy Fuel Oil | | Gas Oil | Gasoline (Premium) | Heavy Fuel Oil | | Gas Oil | Gasoline (Premium) |
| | 1% Sulfur | 3.5% Sulfur | | | 1% Sulfur | 3.5% Sulfur | | |
| 1974 | | | | | | | | |
| 1st Qtr | 14.02 | 12.77 | 15.13 | 19.76 | 13.87 | 12.88 | 13.95 | 19.26 |
| 2d Qtr | 10.15 | 9.70 | 11.77 | 19.61 | 9.90 | 9.35 | 10.93 | 18.77 |
| 3d Qtr | 9.87 | 9.24 | 12.34 | 13.92 | 9.61 | 9.23 | 11.96 | 13.15 |
| 4th Qtr | 11.09 | 10.11 | 12.33 | 13.26 | 10.29 | 9.96 | 11.68 | 12.08 |
| 1975 | | | | | | | | |
| 1st Qtr | 11.97 | 10.49 | 11.18 | 14.20 | 10.57 | 10.24 | 11.10 | 13.23 |
| 2d Qtr | 10.61 | 9.68 | 12.90 | 15.95 | 10.40 | 10.16 | 12.24 | 15.28 |
| 3d Qtr | 9.33 | 8.62 | 14.40 | 15.02 | 8.81 | 8.30 | 13.87 | 14.64 |
| 4th Qtr | 9.53 | 8.33 | 14.84 | 15.85 | 8.99 | 8.38 | 14.56 | 15.24 |
| 1976 | | | | | | | | |
| 1st Qtr | 10.39 | 9.84 | 13.79 | 17.10 | 9.95 | 9.65 | 13.59 | 16.48 |
| 2d Qtr | 10.40 | 9.56 | 14.08 | 19.24 | 10.18 | 9.73 | 13.90 | 18.30 |
| 3d Qtr | 11.06 | 9.99 | 14.40 | 18.02 | 10.34 | 10.06 | 14.19 | 17.37 |
| 4th Qtr | 12.07 | 10.76 | 14.57 | 17.44 | 11.64 | 10.85 | 14.48 | 16.83 |
| 1977 | | | | | | | | |
| 1st Qtr | 13.25 | 11.71 | 15.80 | 16.82 | 13.53 | 12.06 | 15.89 | 16.56 |
| 2d Qtr | 12.51 | 10.77 | 15.74 | 17.26 | 12.25 | 10.88 | 15.71 | 16.48 |
| 3d Qtr | 12.47 | 11.33 | 15.67 | 16.60 | 12.42 | 11.29 | 15.70 | 15.87 |
| Oct | 12.57 | 11.58 | 15.60 | 16.51 | 12.54 | 11.64 | 15.62 | 15.58 |

¹ Barge lot—minimum 3,500 barrels.

² Cargo lot—minimum 130,000 barrels.

| | Regular Gasoline | | Premium Gasoline | | Diesel Fuel | |
|---------------------|--------------------|-----|--------------------|-----|--------------------|-----|
| | Price ¹ | Tax | Price ¹ | Tax | Price ¹ | Tax |
| United States | | | | | | |
| 1973 Oct | 40 | 12 | 44 | 12 | 23 | 12 |
| 1974 Jan | 46 | 12 | 50 | 12 | 32 | 12 |
| Jun | 55 | 12 | 59 | 12 | 36 | 12 |
| 1975 Jan | 53 | 12 | 57 | 12 | 50 | 12 |
| Jun | 57 | 12 | 61 | 12 | 51 | 12 |
| 1976 Jan | 58 | 12 | 63 | 12 | 52 | 12 |
| Jun | 59 | 12 | 64 | 12 | 52 | 12 |
| 1977 Jan | 60 | 12 | 65 | 12 | 54 | 12 |
| Jun | 63 | 12 | 69 | 12 | 57 | 12 |
| Jul | 63 | 12 | 69 | 12 | 57 | 12 |
| Japan | | | | | | |
| 1973 Oct | 88 | 39 | 105 | 39 | 48 | 21 |
| 1974 Jan | 115 | 39 | 133 | 39 | 54 | 21 |
| Jun | 137 | 47 | 155 | 47 | 71 | 21 |
| 1975 Jan | 152 | 47 | 170 | 47 | 78 | 21 |
| Jun | 155 | 47 | 172 | 47 | 82 | 21 |
| 1976 Jan | 156 | 47 | 174 | 47 | 86 | 21 |
| Jun | 157 | 47 | 175 | 47 | 93 | 27 |
| 1977 Jan | 167 | 59 | 185 | 59 | 93 | 27 |
| Jun | 167 | 59 | 185 | 59 | 88 | 25 |
| West Germany | | | | | | |
| 1973 Oct | 112 | 81 | 124 | 82 | 112 | 76 |
| 1974 Jan | 137 | 83 | 149 | 84 | 139 | 79 |
| Jun | 137 | 83 | 149 | 84 | 139 | 79 |
| 1975 Jan | 129 | 84 | 140 | 84 | 137 | 76 |
| Jun | 129 | 84 | 143 | 84 | 137 | 76 |
| 1976 Jan | 141 | 84 | 151 | 85 | 141 | 79 |
| Jun | 144 | 84 | 154 | 85 | 141 | 79 |
| 1977 Jan | 144 | 84 | 154 | 84 | 141 | 79 |
| Jun | 141 | 84 | 150 | 86 | 140 | 79 |
| Sep | 140 | 84 | 149 | 86 | 140 | 79 |
| France ² | | | | | | |
| 1973 Oct | 95 | 65 | 103 | 69 | 66 | 39 |
| 1974 Jan | 123 | 69 | 133 | 73 | 79 | 41 |
| Jun | 123 | 69 | 133 | 73 | 79 | 41 |
| 1975 Jan | 129 | 73 | 139 | 77 | 88 | 38 |
| Jun | 129 | 73 | 139 | 77 | 85 | 46 |
| 1976 Jan | 134 | 75 | 145 | 80 | 95 | 47 |
| Jun | 134 | 76 | 149 | 80 | 95 | 48 |
| 1977 Jan | 159 | 97 | 171 | 103 | 99 | 48 |
| Jun | 167 | 101 | 180 | 108 | 109 | 54 |
| Sep | 167 | 101 | 180 | 108 | 109 | 54 |
| United Kingdom | | | | | | |
| 1973 Oct | 51 | 32 | 53 | 32 | 51 | 32 |
| 1974 Jan | 55 | 32 | 57 | 32 | 55 | 32 |
| Jun | 76 | 39 | 79 | 39 | 78 | 39 |
| 1975 Jan | 100 | 39 | 104 | 39 | 79 | 39 |
| Jun | 100 | 39 | 104 | 39 | 78 | 39 |
| 1976 Jan | 107 | 54 | 109 | 53 | 88 | 39 |
| Jun | 107 | 54 | 109 | 54 | 88 | 39 |
| 1977 Jan | 112 | 55 | 115 | 56 | 111 | 52 |
| Jun | 119 | 64 | 122 | 64 | 120 | 59 |
| Sep | 109 | 55 | 112 | 55 | 120 | 59 |
| Italy ³ | | | | | | |
| 1973 Oct | 75 | 56 | 79 | 58 | 41 | 26 |
| 1974 Jan | 81 | 57 | 85 | 59 | 48 | 27 |
| Jun | 105 | 69 | 111 | 70 | 58 | 27 |
| 1975 Jan | 122 | 83 | 128 | 87 | 58 | 27 |
| Jun | 122 | 83 | 128 | 87 | 60 | 28 |
| 1976 Jan | 128 | 84 | 134 | 87 | 62 | 27 |
| Jun | 164 | 107 | 171 | 110 | 70 | 29 |
| 1977 Jan | 205 | 147 | 213 | 153 | 72 | 29 |
| Jun | 205 | 148 | 213 | 153 | 66 | 19 |
| Sep | 205 | 148 | 213 | 153 | 66 | 19 |
| Canada ³ | | | | | | |
| 1973 Oct | 44 | 17 | 48 | 17 | 48 | 23 |
| 1974 Jan | 44 | 17 | 48 | 17 | 48 | 23 |
| Jun | 51 | 17 | 55 | 17 | 55 | 23 |
| 1975 Jan | 52 | 17 | 56 | 17 | 56 | 23 |
| Jun | 54 | 17 | 58 | 17 | 56 | 23 |
| 1976 Jan | 66 | 25 | 70 | 25 | 61 | 31 |
| Jun | 66 | 25 | 70 | 25 | 62 | 31 |
| 1977 Jan | 70 | 25 | 74 | 25 | 65 | 31 |
| Mar | 72 | 25 | 76 | 25 | 68 | 31 |

¹ Including tax.

² Government price ceilings in effect.

³ Toronto prices.

NOTE: Converted at 28 March 1977 exchange rates.

OPEC Countries: Crude Oil Prices

US \$ per Barrel

| | 4th Qtr 1975 | | 1976 | | 1st Qtr 1977 | | 2d Qtr 1977 | | July 1977 | |
|--|------------------------------|--------------------------|------------------------------|--------------------------|------------------------------|--------------------------|------------------------------|--------------------------|------------------------------|--------------------------|
| | Operating Company Cost | Direct Sales Price | Operating Company Cost | Direct Sales Price | Operating Company Cost | Direct Sales Price | Operating Company Cost | Direct Sales Price | Operating Company Cost | Direct Sales Price |
| OPEC average ¹ | 11.41 | 11.75 | 11.48 | 11.77 | 12.45 | 12.74 | 12.46 | 12.76 | 12.70 | 13.02 |
| Saudi Arabia | | | | | | | | | | |
| Light 34° API 1.70% sulfur | 11.27 | 11.51 | 11.27 | 11.51 | 11.84 | 12.09 | 11.84 | 12.09 | 12.45 | 12.70 |
| Berri 39° API 1.16% sulfur | 11.62 | 11.87 | 11.62 | 11.87 | 12.22 | 12.48 | 12.22 | 12.48 | 12.95 | 13.22 |
| Heavy 27° API 2.85% sulfur | 10.90 | 11.14 | 10.85 | 11.08 | 11.13 | 11.37 | 11.13 | 11.37 | 11.77 | 12.02 |
| Medium 31° API 2.40% sulfur | 11.09 | 11.33 | 11.07 | 11.30 | 11.44 | 11.69 | 11.44 | 11.69 | 12.07 | 12.32 |
| Iran | | | | | | | | | | |
| Light 34° API 1.35% sulfur | 11.40 | 11.62 | 11.40 | 11.62 | 12.59 | 12.81 | 12.59 | 12.81 | 12.59 | 12.81 |
| Heavy 31° API 1.60% sulfur | 11.28 | 11.50 | 11.15 | 11.37 | 12.27 | 12.49 | 12.27 | 12.49 | 12.27 | 12.49 |
| Iraq 35° API 1.95% sulfur | 11.21 | 11.43 | 11.46 | 11.46 | 12.62 | 12.62 | 12.60 | 12.60 | 12.60 | 12.60 |
| Nigeria 34° API 0.16% sulfur | 12.11 | 12.51 | 12.64 | 12.93 | 13.91 | 14.22 | 14.17 | 14.52 | 14.17 | 14.52 |
| UAE 39° API 0.75% sulfur | 11.62 | 11.92 | 11.62 | 11.92 | 12.08 | 12.50 | 12.08 | 12.50 | 12.73 | 13.26 |
| Kuwait 31° API 2.50% sulfur ⁴ | 11.15 | 11.30 | 11.11 | 11.26 | 12.22 | 12.37 | 12.22 | 12.37 | 12.22 | 12.37 |
| Libya 40° API 0.22% sulfur | 12.08 | 12.32 | 12.21 | 12.47 | 13.68 | 13.92 | 13.68 | 13.92 | 13.92 | 14.20 |
| Venezuela 26° API 1.52% sulfur | 11.19 | N.A. | 11.13 | 11.33 | 12.52 | 12.72 | 12.52 | 12.72 | 12.52 | 12.72 |
| Indonesia 35° API 0.09% sulfur | 10.65 | 12.80 | 11.10 | 12.80 | 12.15 | 13.55 | 12.15 | 13.55 | 12.15 | 13.55 |
| Algeria 42° API 0.10% sulfur | 12.62 | 12.75 | 13.01 | 13.01 | 14.29 | 14.29 | 14.29 | 14.29 | 14.45 | 14.45 |
| Qatar 40° API 1.17% sulfur | 11.54 | 11.85 | 11.54 | 11.85 | 12.88 | 13.19 | 12.88 | 13.19 | 12.88 | 13.19 |
| Gabon 29° API 1.26% sulfur | 10.29 | 11.55 | 10.45 | 11.55 | 11.23 | 12.60 | 11.23 | 12.60 | 11.23 | 12.60 |
| Ecuador 28° API 0.93% sulfur | 10.81 | 11.46 | 10.81 | 11.46 | N.A. | 13.00 | N.A. | 13.00 | N.A. | 13.00 |

¹ Total average f.o.b. costs paid by present or former concessionaires.² F.o.b. prices set by the government for direct sales and, in most cases, for the producing company buy-back oil.³ Weighted by the volume of production.⁴ A 10-cent-per-barrel discount will be offered to buyers provided they meet their minimum contractual lifting volumes for second half 1977. The discount will be credited to the lifting companies' accounts beginning in first quarter 1978.

USSR: Crude Oil Production ¹

| | Million b/d |
|------|-------------|
| 1970 | 7.06 |
| 1971 | 7.54 |
| 1972 | 8.01 |
| 1973 | 8.58 |
| 1974 | 9.18 |
| 1975 | 9.82 |
| 1976 | 10.37 |
| 1977 | |
| Jan | 10.64 |
| Feb | 10.69 |
| Mar | 10.83 |
| Apr | 10.85 |
| May | 10.86 |
| Jun | 10.93 |
| Jul | 10.95 |
| Aug | 10.97 |

¹ Including natural gas liquids.USSR: Regional Production of Crude Oil ¹

| | Million b/d | | | | | | |
|----------------|-------------|------|------|------|------|------|-------------------|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 ² |
| Total | 7.06 | 7.54 | 8.01 | 8.58 | 9.18 | 9.82 | 10.4 |
| Urals-Volga | 4.17 | 4.23 | 4.31 | 4.40 | 4.44 | 4.50 | 4.5 |
| West Siberia | 0.63 | 0.90 | 1.25 | 1.75 | 2.33 | 2.96 | 3.6 |
| Central Asia | 0.58 | 0.66 | 0.71 | 0.76 | 0.79 | 0.81 | 0.8 |
| Azerbaijan SSR | 0.40 | 0.38 | 0.37 | 0.36 | 0.36 | 0.34 | 0.3 |
| North Caucasus | 0.68 | 0.72 | 0.69 | 0.59 | 0.53 | 0.47 | 0.4 |
| Ukrainian SSR | 0.27 | 0.28 | 0.28 | 0.27 | 0.25 | 0.23 | 0.2 |
| Komi ASSR | 0.11 | 0.12 | 0.13 | 0.13 | 0.14 | 0.14 | 0.2 |
| Belorussia SSR | 0.08 | 0.11 | 0.12 | 0.14 | 0.16 | 0.16 | 0.2 |
| Far East | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | Negl. |
| Other | 0.09 | 0.09 | 0.10 | 0.13 | 0.13 | 0.17 | 0.1 |

¹ Including natural gas liquids.² Preliminary.

USSR: Imports of Oil

| | Thousand b/d | | | | | | |
|-------------|--------------|------|------|------|------|------|------|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
| Total | 90 | 130 | 180 | 290 | 110 | 150 | 128 |
| Middle East | | | | | | | |
| Egypt | 40 | 40 | 20 | 4 | 3 | 5 | 3 |
| Iraq | 0 | 0 | 80 | 220 | 78 | 108 | 116 |
| Other | 50 | 90 | 80 | 66 | 29 | 37 | 9 |

USSR: Exports of Oil

Thousand b/d

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Total | 1,920 | 2,110 | 2,140 | 2,380 | 2,340 | 2,600 | 2,970 |
| Other Communist countries | 1,010 | 1,110 | 1,200 | 1,350 | 1,440 | 1,550 | 1,680 |
| Eastern Europe | 805 | 895 | 975 | 1,100 | 1,180 | 1,260 | 1,370 |
| Asia | 30 | 25 | 20 | 20 | 30 | 40 | 40 |
| Cuba | 120 | 130 | 140 | 150 | 155 | 160 | 175 |
| Yugoslavia | 55 | 60 | 65 | 80 | 75 | 90 | 95 |
| Free World countries | 910 | 1,000 | 940 | 1,030 | 900 | 1,050 | 1,290 |
| North America | 5 | 0 | 10 | 30 | 20 | 15 | 23 |
| Canada | 0 | 0 | 0 | 0 | 3 | 5 | 2 |
| United States | 5 | 0 | 10 | 30 | 17 | 10 | 21 |
| Western Europe | 760 | 830 | 815 | 880 | 750 | 880 | 1,102 |
| Finland | 155 | 170 | 170 | 200 | 180 | 175 | 190 |
| France | 50 | 90 | 60 | 105 | 30 | 70 | 117 |
| Italy | 205 | 180 | 170 | 175 | 135 | 135 | 240 |
| Netherlands | 30 | 35 | 50 | 65 | 60 | 60 | 53 |
| Sweden | 95 | 90 | 90 | 65 | 60 | 70 | 55 |
| West Germany | 125 | 120 | 125 | 115 | 125 | 150 | 145 |
| Other | 100 | 145 | 150 | 155 | 160 | 220 | 302 |
| Near and Middle East | 60 | 60 | 50 | 30 | 30 | 45 | 56 |
| Egypt | 30 | 32 | 30 | 7 | 4 | 5 | 5 |
| Greece | 20 | 20 | 18 | 16 | 20 | 38 | 40 |
| Other | 10 | 8 | 2 | 7 | 6 | 2 | 11 |
| Africa | 25 | 30 | 35 | 35 | 23 | 20 | 23 |
| Ghana | 10 | 12 | 13 | 12 | 6 | 3 | 5 |
| Morocco | 14 | 17 | 19 | 19 | 13 | 13 | 13 |
| Other | 1 | 1 | 3 | 4 | 4 | 4 | 5 |
| Asia | 60 | 80 | 30 | 55 | 52 | 60 | 65 |
| India | 5 | 10 | 8 | 10 | 20 | 25 | 22 |
| Japan | 54 | 66 | 20 | 41 | 25 | 26 | 35 |
| Other | 1 | 4 | 2 | 4 | 7 | 9 | 8 |
| Latin America | 0 | 0 | 0 | 0 | 25 | 30 | 21 |
| Brazil | 0 | 0 | 0 | 0 | 25 | 30 | 21 |

USSR: Oil Consumption

Million b/d

| | |
|------|------|
| 1970 | 5.15 |
| 1971 | 5.46 |
| 1972 | 5.92 |
| 1973 | 6.33 |
| 1974 | 6.79 |
| 1975 | 7.20 |
| 1976 | 7.55 |

USSR: Natural Gas Production
Million cm/d

| | |
|------|-------|
| 1970 | 542.3 |
| 1971 | 581.9 |
| 1972 | 604.9 |
| 1973 | 647.5 |
| 1974 | 713.8 |
| 1975 | 792.6 |
| 1976 | 876.0 |
| 1977 | |
| Jan | 958.1 |
| Feb | 971.4 |
| Mar | 958.1 |
| Apr | 933.3 |
| May | 912.9 |
| Jun | 903.3 |
| Jul | 900.0 |
| Aug | 909.7 |

USSR: Regional Production of Natural Gas

| | Million cm/d | | | | | | |
|---|--------------|--------------|--------------|--------------|--------------|--------------------|-------------------|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 ¹ | 1976 ¹ |
| Total | 542.3 | 581.9 | 604.9 | 647.5 | 713.8 | 792.6 | 876.0 |
| Central Asia | 131.7 | 148.1 | 162.8 | 196.0 | 226.0 | 260.0 ¹ | 285.6 |
| Ukrainian SSR | 166.8 | 177.0 | 184.1 | 186.6 | 187.2 | 188.2 ¹ | 187.7 |
| North Caucasus | 104.8 | 99.1 | 82.1 | 70.8 | 68.0 | 65.1 | 60.0 ³ |
| West Siberia | 26.5 | 26.5 | 31.1 | 45.0 | 67.7 | 103.0 | 131.1 |
| Komi ASSR | 17.0 | 27.5 | 36.4 | 38.2 | 46.7 | 50.7 ¹ | 53.6 |
| Azerbaydzhan SSR | 15.0 | 15.9 | 18.7 | 22.9 | 24.9 | 27.1 ¹ | 30.1 |
| Urals-Voga and other producing regions in the RSFSR | 80.5 | 87.8 | 89.7 | 88.0 | 93.3 | 98.5 ¹ | 127.9 |

¹ Revised.² Preliminary.³ Estimate based on average rate of decline during 1970-75.

USSR: Natural Gas Trade

| | Million cm/d | | | | | | |
|----------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
| Exports | 9.0 | 12.5 | 13.9 | 18.7 | 38.5 | 53.0 | 70.4 |
| Eastern Europe | 6.4 | 8.6 | 9.4 | 13.3 | 23.4 | 31.0 | 36.7 |
| Bulgaria | 0 | 0 | 0 | 0 | 0.8 | 3.2 | 6.1 |
| Czechoslovakia | 3.7 | 4.5 | 5.3 | 6.5 | 8.9 | 10.1 | 11.7 |
| East Germany | 0 | 0 | 0 | 2.1 | 7.9 | 9.1 | 9.2 |
| Hungary | 0 | 0 | 0 | 0 | 0 | 1.7 | 2.7 |
| Poland | 2.7 | 4.1 | 4.1 | 4.7 | 5.8 | 6.9 | 7.0 |
| Western Europe | 2.6 | 3.9 | 4.5 | 5.4 | 15.1 | 22.0 | 33.7 |
| Austria | 2.6 | 3.9 | 4.5 | 4.4 | 5.8 | 5.1 | 7.6 |
| Finland | 0 | 0 | 0 | 0 | 1.2 | 2.0 | 2.4 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 2.7 |
| Italy | 0 | 0 | 0 | 0 | 2.2 | 6.4 | 10.1 |
| West Germany | 0 | 0 | 0 | 1.0 | 5.9 | 8.5 | 10.9 |
| Imports | 9.7 | 22.3 | 30.2 | 31.3 | 32.7 | 34.0 | 32.2 |
| Afghanistan | 7.1 | 6.9 | 7.8 | 7.5 | 7.8 | 7.8 | 6.8 |
| Iran | 2.6 | 15.4 | 22.4 | 23.8 | 24.9 | 26.2 | 25.4 |

USSR: Consumption of Natural Gas

| | Million cm/d |
|------|--------------|
| 1970 | 543.0 |
| 1971 | 591.7 |
| 1972 | 621.2 |
| 1973 | 660.1 |
| 1974 | 708.0 |
| 1975 | 773.6 |
| 1976 | 837.8 |

Eastern Europe: Oil Production and Consumption

| | Thousand b/d | | | | | | |
|--------------------|--------------|--------------|--------------|--------------|--------------|------------------|-------------|
| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
| Production | 384 | 393 | 404 | 410 | 417 | 423 | 429 |
| Bulgaria | 7 | 6 | 5 | 4 | 3 | 2 | 2 |
| Czechoslovakia | 4 | 4 | 4 | 3 | 3 | 3 | 2 |
| East Germany | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Hungary | 39 | 39 | 40 | 40 | 40 | 40 | 43 |
| Poland | 8 | 8 | 7 | 8 | 11 | 11 | 9 |
| Romania | 268 | 276 | 283 | 286 | 290 | 292 | 294 |
| Yugoslavia | 57 | 59 | 64 | 68 | 69 | 74 | 78 |
| Consumption | 1,236 | 1,385 | 1,525 | 1,797 | 1,822 | 1,977 | N.A. |
| Bulgaria | 179 | 208 | 218 | 244 | 262 | 284 ¹ | N.A. |
| Czechoslovakia | 207 | 236 | 256 | 294 | 308 | 330 ¹ | N.A. |
| East Germany | 191 | 209 | 272 | 293 | 297 | 332 ¹ | N.A. |
| Hungary | 128 | 145 | 163 | 179 | 186 | 204 | N.A. |
| Poland | 170 | 192 | 214 | 266 | 259 | 280 | N.A. |
| Romania | 207 | 227 | 239 | 270 | 276 | 310 ¹ | N.A. |
| Yugoslavia | 154 | 168 | 163 | 251 | 234 | 237 | N.A. |

¹ Estimated.

Thousand b/d

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 (Est.) |
|-------------------------------|------------|--------------|--------------|-----------------|------------------|-----------------|------------------|
| Crude Oil ¹ | | | | | | | |
| Imports | 879 | 1,013 | 1,171 | 1,401 | 1,445 | 1,542 | 1,732 |
| USSR | 679 | 800 | 921 | 1,044 | 1,118 | 1,242 | 1,337 |
| OPEC | 102 | 117 | 107 | 233 | 270 | 260 | 385 |
| Iraq | 40 | 53 | 28 | 53 | 86 | 125 | 102 |
| Iran | 62 | 64 | 71 | 94 | 63 | 72 | 12 |
| Algeria | 0 | 0 | 6 | 0 | 5 | 14 | 0 |
| Libya | 0 | Negl. | 2 | 0 | 4 | 9 | 10 |
| Kuwait | 0 | 0 | 0 | 4 | 0 | 15 | 0 |
| Other OPEC | 0 | 0 | 0 | 82 ² | 112 ² | 25 ² | 261 ² |
| Other Non-OPEC | 98 | 96 | 143 | 124 | 57 | 40 | 10 |
| Belgium | 0 | 0 | 0 | 0 | 6 | 4 | 0 |
| West Germany | 0 | 0 | 0 | 6 | 4 | 0 | 0 |
| Netherlands | 0 | 0 | 0 | 0 | 2 | 11 | 0 |
| Syria | Negl. | 0 | 7 | 3 | Negl. | 0 | 0 |
| France | 0 | 7 | 1 | 0 | 0 | 0 | 0 |
| Other | 98 | 89 | 135 | 115 | 45 | 25 | 10 |
| Petroleum products | | | | | | | |
| Imports | 166 | 153 | 159 | 177 | 180 | 160 | 162 |
| Bulgaria | 58 | 51 | 47 | 47 | 48 | 34 | 35 |
| Czechoslovakia | 22 | 20 | 21 | 25 | 27 | 21 | 25 |
| East Germany | 2 | 4 | 11 | 2 | 2 | 3 | 3 |
| Hungary | 19 | 16 | 14 | 20 | 21 | 19 | 21 |
| Poland | 48 | 45 | 47 | 61 | 60 | 63 | 64 |
| Yugoslavia | 17 | 17 | 19 | 22 | 22 | 20 | 14 |
| Exports | 201 | 182 | 220 | 204 | 236 | 243 | 298 |
| Czechoslovakia | 15 | 18 | 20 | 13 | 10 | 15 | 17 |
| East Germany | 26 | 20 | 47 | 48 | 58 | 57 | 55 |
| Hungary | 18 | 10 | 13 | 13 | 10 | 11 | 11 |
| Poland | 26 | 21 | 34 | 27 | 24 | 32 | 54 |
| Romania | 107 | 107 | 102 | 99 | 129 | 124 | 157 |
| Yugoslavia | 9 | 6 | 4 | 4 | 5 | 4 | 4 |

¹ Crude oil exports are negligible.² Including data that cannot be distributed by country of origin.

Eastern Europe: Natural Gas Production and Consumption

Million cm/d

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|--------------------|---------------|---------------|---------------|---------------|---------------|----------------------------|----------------------------|
| Production | 100.09 | 110.27 | 121.00 | 132.76 | 137.03 | 144.04 | 155.89 |
| Bulgaria | 1.30 | 0.90 | 0.60 | 0.61 | 0.49 | 0.30 | 0.10 |
| Czechoslovakia | 3.30 | 3.35 | 3.19 | 2.85 | 2.67 | 2.55 | 2.69 |
| East Germany | 3.38 | 7.82 | 13.85 | 19.21 | 21.18 | 19.92 ¹ | 19.00 ¹ |
| Hungary | 9.50 | 10.15 | 11.26 | 13.21 | 13.96 | 14.20 | 16.66 |
| Poland | 14.20 | 14.75 | 15.95 | 16.51 | 15.72 | 16.34 | 18.35 |
| Romania | 65.73 | 70.15 | 72.75 | 76.73 | 79.05 | 86.49 | 94.36 ¹ |
| Yugoslavia | 2.68 | 3.15 | 3.40 | 3.64 | 3.96 | 4.24 | 4.73 |
| Consumption | 106.71 | 118.80 | 130.09 | 145.88 | 160.26 | 175.04 ¹ | 193.52 ¹ |
| Bulgaria | 1.30 | 0.90 | 0.60 | 0.61 | 1.33 | 3.55 | 6.21 |
| Czechoslovakia | 6.78 | 7.56 | 8.23 | 9.11 | 11.49 | 12.92 | 15.42 |
| East Germany | 3.82 | 8.12 | 13.85 | 21.37 | 28.96 | 28.76 ¹ | 23.21 ¹ |
| Hungary | 10.05 | 10.72 | 11.81 | 13.76 | 14.51 | 16.41 | 19.97 ¹ |
| Poland | 16.95 | 18.83 | 20.06 | 21.19 | 21.52 | 23.22 | 25.27 |
| Romania | 65.18 | 69.60 | 72.20 | 76.20 | 78.48 | 85.94 ¹ | 85.39 ¹ |
| Yugoslavia | 2.63 | 3.07 | 3.34 | 3.64 | 3.96 | 4.24 | 4.73 |

¹ Estimated.

Eastern Europe: Natural Gas Trade

Million cm/d

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|----------------|-------------|-------------|--------------|--------------|--------------|--------------------------|--------------------------|
| Imports | 7.46 | 9.50 | 10.02 | 13.92 | 23.89 | 31.65¹ | 38.28¹ |
| Bulgaria | 0 | 0 | 0 | 0 | 0.84 | 3.25 | 6.11 |
| Czechoslovakia | 3.72 | 4.55 | 5.36 | 6.53 | 8.92 | 10.47 | 12.73 |
| East Germany | 0.44 | 0.30 | Negl. | 2.16 | 7.78 | 8.84 | 9.21 |
| Hungary | 0.55 | 0.57 | 0.55 | 0.55 | 0.55 | 2.21 | 3.31 |
| Poland | 2.75 | 4.08 | 4.11 | 4.68 | 5.80 | 6.88 | 6.92 |
| Exports | 0.84 | 0.97 | 0.93 | 0.80 | 0.66 | 0.65¹ | 0.65¹ |
| Czechoslovakia | 0.24 | 0.34 | 0.32 | 0.27 | 0.10 | 0.10 | 0.10 ¹ |
| Romania | 0.55 | 0.55 | 0.55 | 0.53 | 0.56 | 0.55 ¹ | 0.55 ¹ |
| Yugoslavia | 0.05 | 0.08 | 0.06 | Negl. | 0 | 0 | 0 |

¹ Estimated.

PRC: Oil Production, Consumption, and Trade

Thousand b/d

| | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|--------------------------|------|------|------|-------|-------|-------|-------|
| Crude Oil Production | 570 | 730 | 860 | 1,090 | 1,310 | 1,490 | 1,670 |
| Crude Oil Consumption | 500 | 630 | 740 | 920 | 1,030 | 1,300 | 1,500 |
| Oil Trade | | | | | | | |
| Crude Exports | | | | | | | |
| Japan ¹ | 0 | 0 | 0 | 20 | 80 | 164 | 136 |
| Philippines ¹ | 0 | 0 | 0 | 0 | 2.8 | 10.0 | 10.0 |
| Thailand ¹ | 0 | 0 | 0 | 0 | 0 | 5.0 | 0 |
| Product Exports | | | | | | | |
| North Korea | 10 | 10 | 10 | 5 | 5 | 5 | 5 |
| Thailand ¹ | 0 | 0 | 0 | 0 | 0 | 0 | 6.2 |
| Vietnam | 20 | 20 | 20 | 8 | 9 | 11 | 11 |

¹ Data represent contracts, not all of which were delivered.

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*108 - 30 November
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INTERNATIONAL ENERGY BIWEEKLY REVIEW

Overview

The strength of Iran's commitment to an oil price freeze will have a crucial bearing on OPEC's decision on whether to raise 1978 crude oil prices. At this time, it is still uncertain how forcefully Iran will assert its support of a price freeze.

The Shah shifted his position while in Washington by pledging that Iran would actively work for a freeze when the cartel members meet in Caracas on 20 December. A staunch Iranian-Saudi Arabian coalition probably could successfully hold the price line, even though most OPEC states strongly favor an increase.

Tehran initially had planned to maintain a neutral position at Caracas and side with the majority. This would have led to an increase of 5 to 10 percent, since Riyadh previously indicated it would not stand alone in support of a price freeze. Shortly before the Shah's announcement, Saudi oil minister Yamani delivered a letter to the United Arab Emirates stating that Saudi Arabia would support a price freeze, unless this policy would cause a split among OPEC countries.

If Iran's commitment to a freeze is softer than the Shah's recent assurances suggest, then an increase in price is still likely. To push through a freeze, the Iranian delegation will have to stick to its stance beyond the opening rounds of negotiations at Caracas and resist pressure to reach an accommodation with the majority in later rounds.

The Shah's recent announcement has sparked little change in strategy among the proponents of a price hike. Those seeking an increase hope to mold a common front that would pressure Saudi Arabia and Iran to conform to the majority position. Both sides want to avoid a replay of the split that occurred last year at Doha.

The Shah's revised position probably has caused some cartel members to lower their expectations. Venezuelan oil minister Hernandez and his Indonesian counterpart

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recently met separately with Kuwaiti oil minister Kazimi and agreed to seek an 8 percent increase at Caracas. These countries reportedly are willing to implement such an increase in two stages—4 percent in January and 4 percent in July. Additional bargaining among Arab members of OPEC will take place at the OAPEC ministerial meeting scheduled for mid-December in Bahrain.

* * * * *

Abu Dhabi reportedly will reduce its government-imposed oil production ceilings next year by about 250,000 b/d, more than 15 percent below current levels. This decision results from concerns of oil ministry officials—currently disputed by the operating companies—that technical constraints at important onshore and offshore fields limit levels of prudent oil output, at least in the near term. This ministry argument is buttressed by studies of independent reservoir engineering consultants. The government is also reacting to the lack of petroleum exploration in the past few years and the resulting net decline in oil reserves. We do not agree with the judgment in oil industry publications that these production restrictions are politically induced by the current market surplus. We will provide an in-depth technical analysis of this subject in a future issue. (Secret Noform-Nocontract-Orcon)

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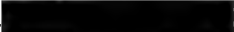



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| OPEC Participation in Downstream Petroleum Operations ... | pg. 10 |
| Oil Reserves of Exporting Countries and the Time Horizon of Their Depletion | pg. 12 |
| Soviets Move Toward Tertiary Oil Recovery <i>delete 3rd para</i> | pg. 14 |
| Israelis Find Oil in Gulf of Suez | pg. 15 |

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105 - 30 November 77

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FOLLOWING SANITIZED OVERVIEW FROM OER'S INTERNATIONAL ENERGY

BIWEEKLY REVIEW ENDING 30 NOVEMBER 1977 IS APPROVED FOR PASSING TO

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1. THE STRENGTH OF IRAN'S COMMITMENT TO AN OIL PRICE FREEZE WILL HAVE A CRUCIAL BEARING ON OPEC'S DECISION ON WHETHER TO RAISE 1978 CRUDE OIL PRICES.4

2. THE SHAH SHIFTED HIS POSITION WHILE IN WASHINGTON BY PLEDGING THAT IRAN WOULD ACTIVELY WORK FOR A FREEZE WHEN THE CARTEL MEMBERS MEET IN CARACAS ON 20 DECEMBER. A STAUNCH IRANIAN-SAUDI ARABIAN COALITION PROBABLY COULD SUCCESSFULLY HOLD THE PRICE LINE, EVEN THOUGH MOST OPEC STATES STRONGLY FAVOR AN INCREASE.4

3. TEHRAN INITIALLY HAD PLANNED TO MAINTAIN A NEUTRAL POSITION AT CARACAS AND SIDE WITH THE MAJORITY. THIS WOULD HAVE LED TO AN INCREASE OF 5 TO 10 PERCENT, SINCE RIYADH PREVIOUSLY INDICATED IT WOULD NOT STAND ALONE IN SUPPORT OF A PRICE FREEZE.4

4. TO PUSH THROUGH A FREEZE, THE IRANIAN DELEGATION WILL HAVE

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TO STICK TO ITS STANCE BEYOND THE OPENING ROUNDS OF NEGOTIATIONS AT CARACAS AND RESIST PRESSURE TO REACH AN ACCOMMODATION WITH THE MAJORITY IN LATER ROUNDS.

5. THE SHAH'S RECENT ANNOUNCEMENT HAS SPARKED LITTLE CHANGE IN STRATEGY AMONG THE PROPONENTS OF A PRICE HIKE. THOSE SEEKING AN INCREASE HOPE TO MOLD A COMMON FRONT THAT WOULD PRESSURE SAUDI ARABIA AND IRAN TO CONFORM TO THE MAJORITY POSITION. BOTH SIDES WANT TO AVOID A REPLAY OF THE SPLIT THAT OCCURRED LAST YEAR AT DOHA. THE SHAH'S REVISED POSITION PROBABLY HAS CAUSED SOME CARTEL MEMBERS TO LOWER THEIR EXPECTATIONS.

6. ADDITIONAL BARGAINING AMONG ARAB MEMBERS OF OPEC WILL TAKE PLACE AT THE OPEC MINISTERIAL MEETING SCHEDULED FOR MID-DECEMBER IN BAHRAIN. {SECRET}. E 1,2,3,IMPDET,UNINTEL.H

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PATION IN DOWNSTREAM PETROLEUM OPERATIONS {UNCLASSIFIED}; {B} OIL
RESERVES OF EXPORTING COUNTRIES AND THE TIME HORIZON OF THEIR
DEPLETION {UNCLASSIFIED}; AND {C} ISRAELIS FIND OIL IN GULF OF
SUEZ {CONFIDENTIAL} -- RELEASABLE WITHOUT SANITIZATION TO ALL.

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ARTICLES FROM OER'S EIWR AND IEB FOR RELEASE [REDACTED] 5X1C

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1. TWO ARTICLES, BOTH UNCLASSIFIED, FROM OER'S ECONOMIC INTELLIGENCE WEEKLY REVIEW OF 1 DECEMBER AND FOUR ARTICLES FROM OER'S INTERNATIONAL ENERGY BI-WEEKLY REVIEW ENDING 30 NOVEMBER 1977 PREPARED FOR RELEASE [REDACTED] BEING SENT BY TM 362691 [REDACTED] AND TM 362692 [REDACTED]

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A. "OPEC PARTICIPATION IN DOWNSTREAM PETROLEUM OPERATIONS: (UNCLASSIFIED);

B. "OIL RESERVES OF EXPORTING COUNTRIES AND THE TIME HORIZON OF THEIR DEPLETION" (UNCLASSIFIED)"

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C. "ISRAELIS FIND OIL IN GULF OF SUEZ" (CONFIDENTIAL) RELEASABLE WITHOUT SANITIZATION [REDACTED]

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• (24-80)

MIDDLE EAST: REFINING AND PETROCHEMICAL EXPANSION

[illegible]

| | | | | | | |
|------------|-------------------------|---------|----------|---------|--|--|
| SECRET NO. | OFFICE (9-10) | | | | | |
| | 02 OGR | 04 OGCR | 07 OSI | 27 CRG | | |
| | 03 OGR | 06 OCR | 08 OWI | 28 ORPA | | |
| | 30 OIA | 40 DIA | 60 STATE | 59 NSA | | |
| | JOINT OFFICE (specify): | | | (-) | | |

DOCUMENT TYPE (15-16)

| | | | | | | | |
|---------|---------|----|----|-------|-------|--------|------------|
| 1 | 1 | 13 | 14 | 04 IM | 11 IH | 15 TM | 53 EIW |
| | | | | 05 M | 12 IB | 32 NID | 60 SURFYOR |
| | | | | 07 IR | 13 RP | 41 SID | 61 WIS |
| 15T KIC | 2ND KIC | | | 08 R | 14 BR | 51 IOD | |

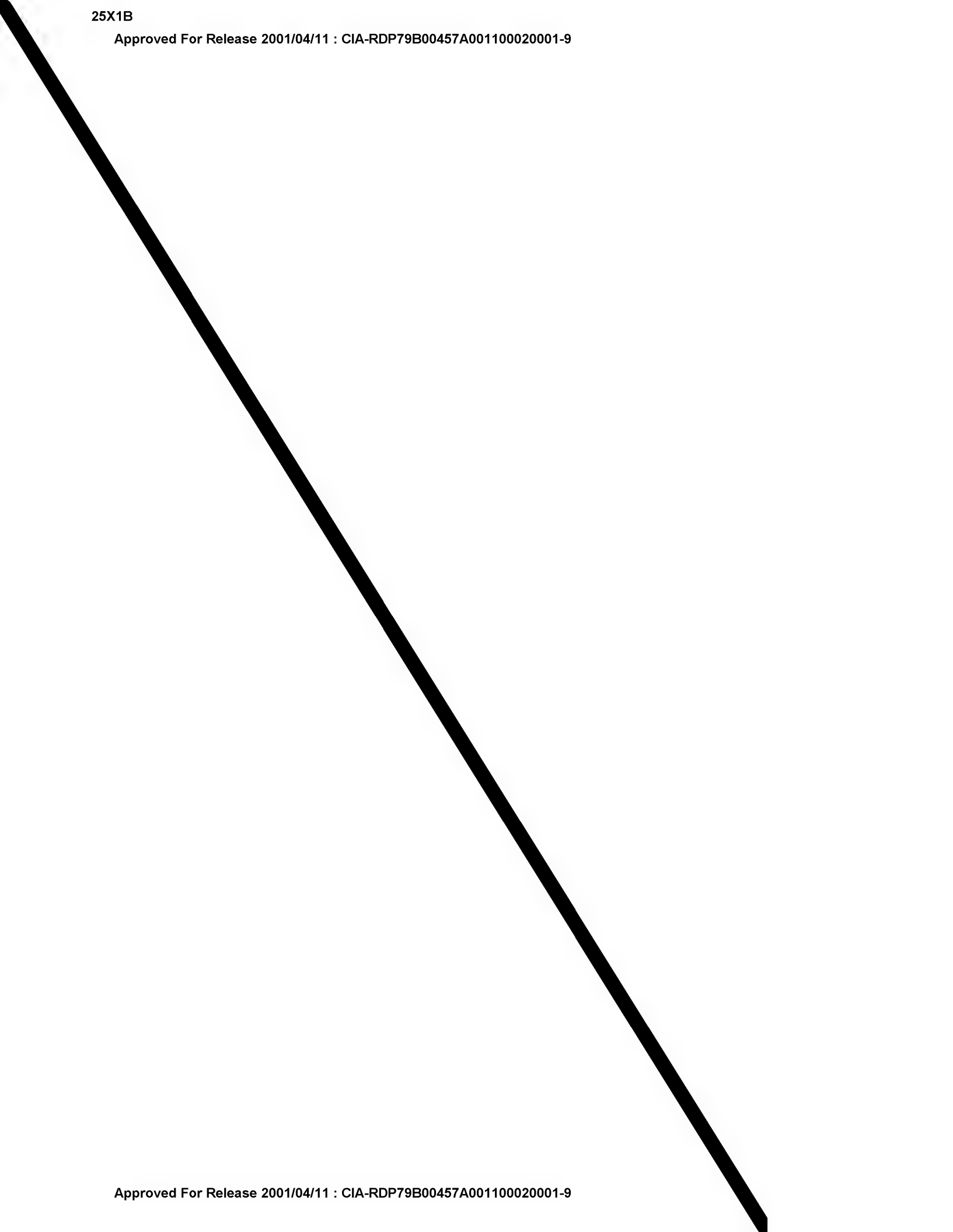
| | | | | |
|---|----|----|----------------------------------|---|
| 1 | 12 | 20 | CLASSIFICATION: SECRET | CLASSIFICATION CONTROLS: NOFORN / NO CONTRACT |
| | | | TOPICAL CATEGORY | GEOGRAPHIC AREA CATEGORY |

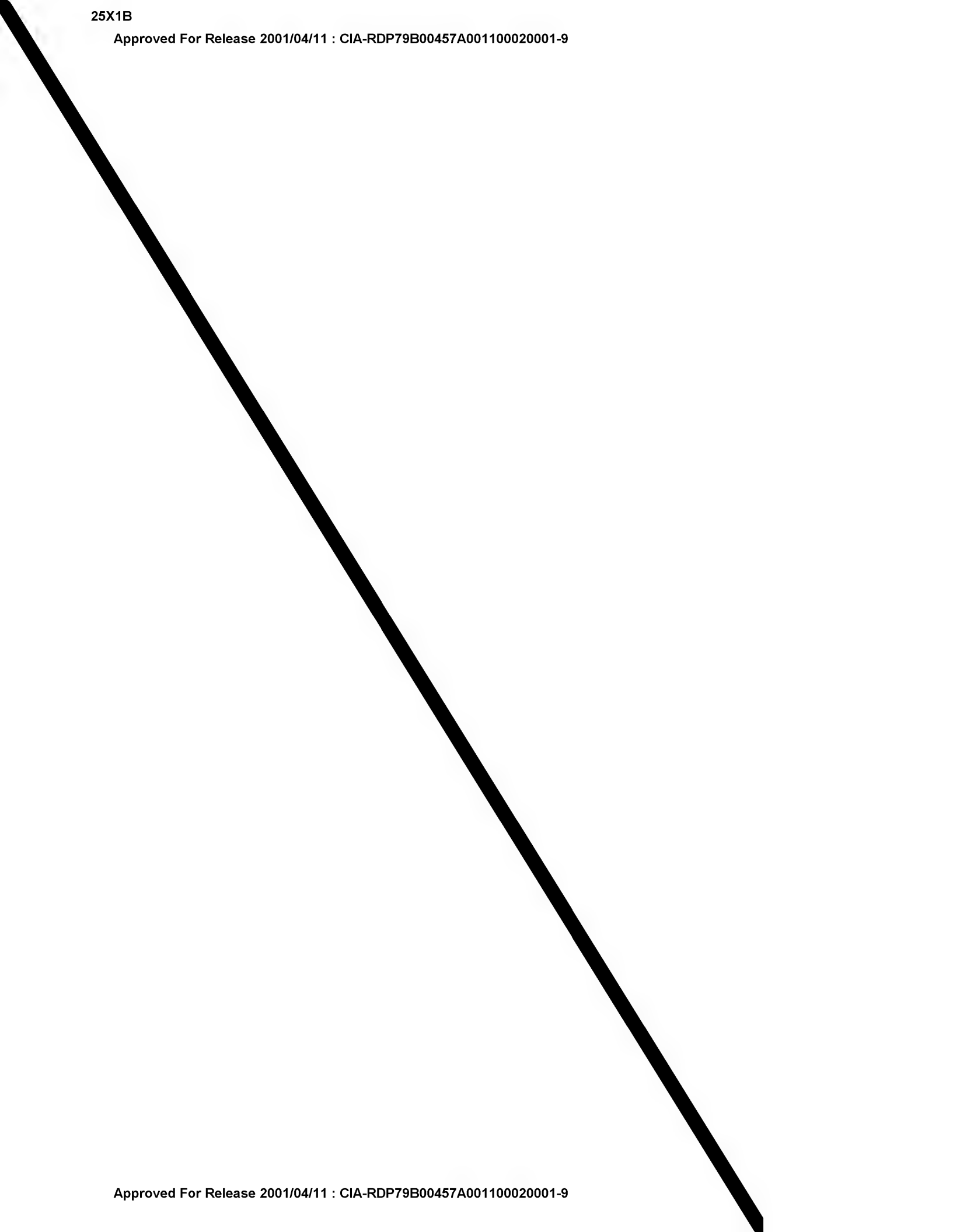
| | | | |
|-------------------------------------|-------------------------|-------------------------------------|---------------------|
| <input type="checkbox"/> | Initial Politics | <input type="checkbox"/> | USSR |
| <input type="checkbox"/> | International Relations | <input type="checkbox"/> | Eastern Europe |
| <input checked="" type="checkbox"/> | Economics | <input type="checkbox"/> | Western Europe |
| <input type="checkbox"/> | Military | <input type="checkbox"/> | China |
| <input type="checkbox"/> | Science & Technology | <input type="checkbox"/> | Other Far East |
| <input type="checkbox"/> | Geography | <input checked="" type="checkbox"/> | Near East/N. Africa |
| <input type="checkbox"/> | Biography | <input type="checkbox"/> | South Asia |
| | | <input type="checkbox"/> | Africa |
| | | <input type="checkbox"/> | Latin America |

7. SPECIFIC COUNTRIES: SAUDI ARABIA, KUWAIT, ABU DHABI, SYRIA, IRAQ

TO BE COMPLETED BY R & E

[illegible]





Approved For Release 2001/04/11 : CIA-RDP79B00457A0011000200019

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SECTION I

NAME AND TELEPHONE NUMBER OF ANALYST

25X1A

CARD 1 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

| CARD TYPE (1-2) | | SURVEY NO. (3-8) | | DATE PUBLISHED (9-12) MO YR | | PUBLICATION NUMBER (13-23) | | | | FOR CRG ONLY CIB PUBLICATION DATE (13-18) MO DAY YR | | | | | |
|--------------------|--|---------------------|--|-----------------------------------|----|-------------------------------|---|---|---|--|---|---|---|---|---|
| 1 | | | | 11 | 77 | ER | 1 | 0 | 0 | 7 | 7 | - | 0 | 2 | 4 |

PUBLICATION TITLE

(24-80)

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|----|---|---|---|---|----|
| 24 | (24-80) | | | | | | | | | | | | | | | | | | | | 52 | | | | | |
| 0 | P | E | C | P | A | R | T | I | C | I | P | A | T | I | O | N | I | N | D | O | W | N | S | T | R | 52 |
| 53 | E | A | M | P | E | T | R | O | L | E | U | M | O | P | E | R | A | T | I | O | N | S | | | | 80 |

| | |
|--------|--|
| CARD 2 | XXXVXX |
|--------|--|

| | | | | | | |
|-----------|------------|--|--|---------|----------|---------|
| CARD TYPE | SURVEY NO. | | OFFICE (9-10) | | | |
| (1-2) | (3-8) | | <input checked="" type="checkbox"/> 02 OER | 04 OGCR | 07 OSI | 27 CRG |
| | | | 03 OSR | 06 OCR | 08 OWI | 28 ORPA |
| 2 | | | 30 CIA | 40 DIA | 60 STATE | 59 NSA |
| | | | JOINT OFFICE (specify): | | | (- -) |

KEY INTELLIGENCE QUESTION(S)-KIQ

DOCUMENT TYPE (15-16)

| | | | | | | | |
|-----------------------|-----------|----|----|-------|-------|--------|-------------|
| DOCUMENT TYPE (18-18) | | | | | | | |
| 11 | 12 | 13 | 14 | 04 IM | 11 IH | 15 TM | 53 EIW |
| 66 | | | | 05 M | 12 IB | 32 NID | 60 SURVEYOR |
| | | | | 07 IR | 13 RP | 41 SID | 61 WIS |
| 1ST KIQ # | 2ND KIQ # | | | 08 R | 14 BR | 51 IOD | |

| | | | | | | | |
|----|----|----|----|------------------------------|--|--------------------------|--|
| 17 | 18 | 19 | 20 | CLASSIFICATION: UNCLASSIFIED | | CLASSIFICATION CONTROLS: | |
|----|----|----|----|------------------------------|--|--------------------------|--|

TOPICAL CATEGORY

GEOGRAPHIC AREA CATEGORY

| | |
|---|-------------------------|
| | Internal Politics |
| | International Relations |
| X | Economics |
| | Military |
| | Science & Technology |
| | Geography |
| | Biology |

| | |
|---|---------------------|
| | USSR |
| | Eastern Europe |
| | Western Europe |
| | China |
| | Other Far East |
| X | Near East/N. Africa |
| | South Asia |
| | Africa |
| | Latin America |

LIST SPECIFIC COUNTRIES: SPEC COUNTRIES

TO BE COMPLETED BY R & E

CONTROL NO.
(21-22)

TOPIC
(23-24)

AREA
(25.28)

Approved For Release 2001/04/11 : CIA-RDP79B00457A001100020001-9

25X1B

Approved For Release 2001/04/11 : CIA-RDP79B00457A001100020001-9

Approved For Release 2001/04/11 : CIA-RDP79B00457A001100020001-9

GENERAL INSTRUCTIONS

3E63 x 7871 (black) x 1724 (red).

NAME AND TELEPHONE NUMBER OF ANALYST

CARD 1 XXXXXXXXXXXXXXXXXXXXXXXX [REDACTED] XXXXXXXXXXXXXXXXXXXXXXXX

[illegible]

(24-80)

[illegible]

| | | | | | |
|-------------------------|------------|--|----------------------------------|-----------------------------------|----------------------------------|
| TYPE | SURVEY NO. | <input checked="" type="checkbox"/> 02 OER | <input type="checkbox"/> 04 OGCR | <input type="checkbox"/> 07 OSI | <input type="checkbox"/> 27 CRG |
| (1-2) | (3-8) | <input type="checkbox"/> 03 OSR | <input type="checkbox"/> 06 OCR | <input type="checkbox"/> 08 OWI | <input type="checkbox"/> 28 ORPA |
| 2 | | <input type="checkbox"/> 30 OIA | <input type="checkbox"/> 40 DIA | <input type="checkbox"/> 60 STATE | <input type="checkbox"/> 59 NSA |
| JOINT OFFICE (specify): | | | | | (-) |

DOCUMENT TYPE (18-16)

| | | | | | | | |
|-----------|-----------|--|-------|-------|----|--------|-------------|
| 66 | | | 05 M | 12 TB | | 32 NID | 60 SURVEYOR |
| 1ST KIQ # | 2ND KIQ # | | 07 IR | 13 RP | | 41 SID | 61 WIS |
| | | | 08 R | 14 BR | XX | 51 IOD | |

CLASSIFICATION AUTHORITY: **SECRET** CLASSIFICATION CONTROLS: **NF NC OC**

GEOGRAPHIC AREA CATEGORY

| | | | |
|-------------------------------------|-------------------------|-------------------------------------|---------------------|
| <input type="checkbox"/> | Internal Politics | <input type="checkbox"/> | USSR |
| <input type="checkbox"/> | International Relations | <input type="checkbox"/> | Eastern Europe |
| <input checked="" type="checkbox"/> | Economics | <input type="checkbox"/> | Western Europe |
| <input type="checkbox"/> | Military | <input type="checkbox"/> | China |
| <input type="checkbox"/> | Science & Technology | <input type="checkbox"/> | Other Far East |
| <input type="checkbox"/> | Geography | <input checked="" type="checkbox"/> | Near East/N. Africa |
| <input type="checkbox"/> | Biography | <input type="checkbox"/> | South Asia |
| | | <input type="checkbox"/> | Africa |
| | | <input type="checkbox"/> | Latin America |

LIST SPECIFIC COUNTRIES: OPEC COUNTRIES

AREA
(25-28)

25X1B

Approved For Release 2001/04/11 : CIA-RDP79B00457A001100020001-9

Approved For Release 2001/04/11 : CIA-RDP79B00457A001100020001-9

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SECTION I

NAME AND TELEPHONE NUMBER OF ANALYST _____

5804. c

25X1A

CARD 1 XXXXXXXXXXXXXXXXXXXXXXXXXX[REDACTED]XX

| CARD TYPE (1-2) | SURVEY NO. (3-8) | DATE PUBLISHED (9-12) MO YR | PUBLICATION NUMBER (13-23) | FOR CRG ONLY CIB PUBLICATION DATE (13-18) | | |
|-----------------------|---------------------|-----------------------------------|-------------------------------|---|-----|----|
| | | | | MO | DAY | YR |
| 1 | | 11 77 | JO 077-024 | | | |

PUBLICATION TITLE

(24-BQ)

| | | | | | | | | | | | |
|----|------------------------------|--|--|--|--|--|--|--|--|--|----|
| 24 | Israelis find oil in Gulf of | | | | | | | | | | 80 |
| 25 | Suez | | | | | | | | | | |

[illegible]

| CARD TYPE | | SURVEY NO. | | OFFICE (9-10) | | | | | | | |
|-------------------------|--|------------|--|---------------|---------|----------|---------|--|--|---------|--|
| (1-2) | | (3-8) | | 02 OER | 04 OCCR | 07 OSI | 27 CRG | | | | |
| | | | | 03 OSR | 06 OCP | 08 OWI | 28 ORPA | | | | |
| 2 | | | | 30 OIA | 50 DIA | 60 STATE | 59 NSA | | | | |
| JOINT OFFICE (specify): | | | | | | | | | | (- -) | |

KEY INTELLIGENCE QUESTION(S)-KIQ

| | | | | | | | |
|---------------------|----|----|----|-------|-------|--------|-------------|
| 11 | 12 | 13 | 14 | 06 TM | 11 TH | 15 TM | 53 : W |
| | | | | 06 TM | 12 IE | 32 NND | 60 SURVEYOR |
| | | | | 07 F | 13 RP | 41 SID | 61 WIS |
| | | | | 08 P | 14 BR | 51 IOD | |
| 1ST KIQ # 2ND KIQ # | | | | | | | |

| | | | | | |
|----|----|----|----|-------------------|--------------------------|
| 17 | 18 | 19 | 20 | CLASSIFICATION: C | CLASSIFICATION CONTROLS: |
| | | | | | |

TOPICAL CATEGORY

GEOGRAPHIC AREA CATEGORY

| | |
|-------------------------------------|-------------------------|
| | Internal Politics |
| | International Relations |
| <input checked="" type="checkbox"/> | Economics |
| | Military |
| | Science & Technology |
| | Geography |
| | Biography |

| | |
|---|----------------------|
| | USSR |
| | Eastern Europe |
| | Western Europe |
| | China |
| | Other Far East |
| ← | Nea. East. N. Africa |
| | South Asia |
| | Africa |
| | Latin America |

LIST SPECIFIC COUNTRIES:

ISRAEL Egypt

TO BE COMPLETED BY R & E

[illegible]

